SERVICE MANUAL

COLOR MONITOR

7Glr / 7GlrA
7Vlr / 7VlrA
7Vlr+ / 7VlrA+

S 770
S 785

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1. SPECIFICATIONS FOR S785/ S770 COLOR MONITOR

The S785 / S770 series monitor include model : 7GIr , 7GIrA , 7VIr+ , 7VIrA+ , 7VIr, 7VIrA.
- 7GIr / 7GIrA Horizontal Frequency : 30 - 85 Khz
- 7VIr+ / 7VIrA+ / 7VIr / 7VIrA Horizontal Frequency : 30 - 70 Khz
- 7GIr / 7GIrA / 7VIr+ / 7VIrA+ With TCO, 7VIr / 7VIrA With MPRII

1. CRT
   a. 43.2 cm (17V) 90 Deflection, 29mm Neck, 0.26mm Dot Pitch, AGRAS, Dark Tint
   b. 43.2 cm (17V) 90 Deflection, 29mm Neck, 0.28mm Dot Pitch, AGRAS
   " a " for 7GIr / 7GIrA
   " b " for 7VIr+ / 7VIrA+ / 7VIr / 7VIrA

2. Viewable image Size: 40 cm (15.8") diagonal

3. Display Color: Unlimited Colors

4. External Controls:
   Front Panel Stand-by Power Switch; Shuttle VR & Tact SW
   OSD Switch (7 GIr / 7VIr+ / 7VIr)
   Audio Mute Switch (7GIrA/ 7VIrA+ / 7VIrA)
   Back Cover Power Switch
   OSD Control Contrast; Brightness; V-Size; V-Center; H-Size; H-Center; Pincushion; Trapezoid; Unbalance Pincushion; Parallelogram; Rotation; Degaussing; Color Temperature : 9300°K, 6500°K.
   User's Color : User's Recall, R / G / B Cutoff & R / G Gain Control Recall; Frequency Display
   Volume (7GIrA/ 7VIrA+ / 7VIrA); OSD off (7 GIr / 7VIr+ / 7VIr)

5. Power Source:
   Switching Mode Power Supply
   AC 100 ~240V, 50/60Hz Universal Type
   100 Watts MAX.

6. Display Size
   Horizontal: 300 mm
   Vertical: 230 mm

7. Scanning Frequencies
   Horizontal: 30KHz ~ 85KHz (7GIr series)
   30KHz ~ 70 KHz (7VIr series)
   Vertical: 50 Hz ~ 130 Hz

8. Factory Preset Timings: 9 (for 7GIr series) 8 (for 7VIr series)
   User Timings: 16 (for 7GIr series) 17 (for 7VIr series)

9. Misconvergence
   Center: 0.3 mm Max.
   Corner: 0.4 mm Max.

10. Video Bandwidth: 100 Mhz

11. Input Video Signal (Mode 1 ~ 9 for 7GIr series; Mode 1 ~ 8 for 7VIr series)

	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5
	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog
Horiz. Sync:	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level
	Negative	Negative	Negative	Negative	Positive
Vert. Sync:	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level
	Negative	Negative	Negative	Negative	Positive

Horizontal:	640 (H)	720 (H)	640 (H)	640 (H)	800 (H)
Vertical :	480 (V)	400 (V)	480 (V)	480(V)	600(V)
Fh (KHz):	31.5	31.5	37.5	43.3	46.8
Fv (Hz) :	60	70	75	85	75

	Mode 6	Mode 7	Mode 8	Mode 9
	RGB Analog	RGB Analog	RGB Analog	RGB Analog
Horiz. Sync:	TTL Level	TTL Level	TTL Level	TTL Level
	Positive	Positive	Positive	Positive
Vert. Sync:	TTL Level	TTL Level	TTL Level	TTL Level
	Positive	Positive	Positive	Positive

Horizontal:	800 (H)	1024 (H)	1024 (H)	1280 (H)
Vertical :	600 (V)	768 (V)	768 (V)	1024 (V)
Fh (KHz):	53.6	60.0	68.7	80
Fv (Hz) :	85	75	85	75

12. Operating Temperature: 5°C to 40°C Ambient

13. Humidity:
20 % to 80 % Relative, Non-Condensing

14. Weight: 18.0 Kgs(Net), 21.8 Kgs(Gross)

15. Dimensions Monitor:
Carton : 574 mm (W) x 537 mm (H) x 590 mm (D)
Monitor & Base : 410 mm (W) x 438 mm (H) x 450 mm (D)

16. External Connection:
15 Pin D-type Connector
AC Power Cord

17. Regulations:UL, CSA, DHHS, FCC, T V/GS, CE, T V/MPR-II, TCO92
If discrepancy occurs between the above specification regulation and that listed on ID label, use the later as standard.

2. PRECAUTIONS AND NOTICES

2-1 SAFETY PRECAUTIONS

1. Observe all caution and safety related notes located inside the display cabinet.

2. Operation of the display with the cover removed, may cause a serious shock hazard from the display power supply. Work on the display should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipment.

3. Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People who are not so equipped should be kept away while handling picture tube. Keep picture tube away from the body while handling.

4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection. use the designated replacement tube only, and adjust the voltages so that the designated maximum rating at the anode will not be exceeded.

5. Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger or shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads.
Test method for current leakage is described as follow.

   (a) Plug the AC line cord directly into rated AC outlet (do not use a line isolation transformer during this check).

   (b) Use an AC voltmeter having 5000 ohms per volt or with more sensitivity in the following manner: Connect a 1500 ohms 10 Watt resistor, paralleled by a 0.15UF, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15UF capacitor.

   (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.

   (d) Voltage measured must not exceed 0.5 volts RMS. This corresponds to 0.35 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2-2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

2-3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor (more than 1/2W of metal oxide film resistor) in circuit board, keep the resistor about 10mm (1/2 in) away from circuit board.
3. Keep wires away from high voltage or high temperature components.
4. Keep wires in their original position so as to reduce interference.

2-4 HIGH VOLTAGE WARNING

Operation of monitor outside of cabinet or with back removed may cause a serious shock hazard. Work on this model should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain interconnecting ground lead connections between chassis and picture tube dag when operating chassis.

Certain HV failures can increase X-ray radiation. Monitor should not be operated with HV levels exceeding the specified rating for the chassis type. The maximum operating HV specified for the chassis used in this monitor is

26KV ± 1KV

with a line voltage of 120/240 VAC. Higher voltage may also increase possibility of failure in HV supply.

It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.

To determine the presence of high voltage, use an accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device. When servicing the High Voltage System, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead.(AC line cord disconnected from AC power outlet.)

The picture tube used in this monitor employs integral implosion protection. Replace with tube of the same type number for continue safety. Do not lift picture tube by the neck. Handle the picture tube only after discharging the high voltage completely.

2-5 DDC1 / 2B (Adapt to DDC Model)

This monitor is equipped with VESA DDC1 / 2B according to VESA DDC STANDARD. It will allow the monitor to inform the host system about its identity and depending on the level of DDC used, communicate additional levels of display capabilities. The communication channel is defined in two levels, one DDC1 and one DDC2B.

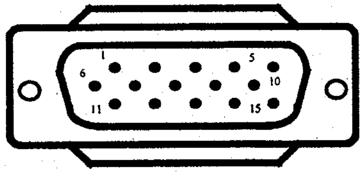
The DDC1 is a uni-directional data channel from the Display to the Host, continuously transmitting EDID information. The DDC2B is a uni-directional data channel based on the I^2C protocol. The host can request EDID information via the DDC2B channel.

3. OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the 7Glr / 7GlrA and 7Vlr+ / 7VlrA+ / 7Vlr / 7VlrA color display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduit ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.

2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display
Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED	9.	NC
2.	GREEN	10.	GND
3.	BLUE	11.	SYNC. GND
4.	GND	12.	SDA
5.	GND	13.	HORIZ. SYNC
6.	GND-R	14.	VERT. SYNC / VCLK
7.	GND-G	15.	SCL
8.	GND-B		

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty minutes for display tube warm-up. The Power-On indicator lights when the display is on.

4. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display.

5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC. Other the monitor will display “ Video Error “. If you turn on the monitor before you turn on the computer, the power LED also lights green, the monitor also display “ Video Error “.

6. If your 7Glr or 7GlrA color display requires service, it must be returned with the power cord.

4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

4-2 MAIN ADJUSTMENTS

NO.	FUNCTION	LOCATION	DESIGNATION
1.	B + ADJ	PCB - MAIN	VR901
2.	16.0 V ADJ	PCB - MAIN	VR802
3.	HOR. CENTER	PCB - MAIN	VR803
4.	BRIGHTNESS ADJ	PCB - MAIN	VR401
5.	ABL ADJ	PCB - MAIN	VR801

4-3 ADJUSTMENT METHOD

1. B + & 16.0 V Voltage Adjustment:

A. Chroma-2135 Signal generator or PC equivalent set mode 1, VGA 640 x 480 Crosshatch Pattern . Image Size : 300 x 230 ± 3 mm.

B. Connect a DC Voltage meter between D912 (-) and ground, then adjust VR901 to be 14.4 ± 0.2 VDC.

C. Connect a DC Voltage meter between D813 (-) and ground, then adjust VR802 to be 16.0 ~ 16.3 VDC to let High voltage to be 25.5 ± 0.1 KV.

2. Factory preset Timings Adjustment:

2-1. Performance Preset

A. Select OSD function to Adjust the image performance of all preset mode to meet specification.

B. Press shuttle knob or press the OSD knob, the OSD Main Menu is displayed.

C. Rotate shuttle VR to select " Information " icon and enter, you can see the Hori. and Vert. Freqency displayed " HF / VF ..." Short TP2 (W101 pin 2 - "k") to ground, OSD Main Manual displayed, select the 1st icon and enter, then all preset mode are saved to factory presetting area. (ALL SAVE)

2-2. 6500° K Color Preset

A. Select the " User Color " icon and enter to color temperature alignment page to adjust Green / Red driver to increase or decrease Green / Red gain. To let white balance to meet x = .313 ± .020, y = .329 ±.020 at Y = 4 FL & Y = 25 FL.

B. Rotate shuttle VR to select " Information " icon and enter, you can see the Hori. and Vert. Freqency displayed " HF / VF ..." Short TP2 to ground, OSD Main Menu displayed, select the fourth icon and enter, then 6500°K COLOR are saved to factory presetting area. (6500°K SAVE)

2-3. 9300° K Color Preset

A. Select the " User Color " icon and enter to color temperature alignment page to adjust Green / Red driver to increase or decrease Green / Red gain. To let white balance to meet x = .281 ± .020, y = .311 ±..020 at Y = 4 FL & Y = 25 FL.

B. Rotate shuttle VR to select " Information " icon and enter, you can see the Hori. and Vert. Freqency displayed " HF / VF ..." Short TP2 to ground, OSD Main Menu displayed, select the third icon and enter, then 6500°K COLOR are saved to factory presetting area. (9300°K SAVE)

3. White Balance, Luminance Adjustment:

A. Bias (Low light) adjustment:

(a) Set mode 1 640 x 480 Fh: 31.5 KHz full white pattern.

(b) Warm up more than 20 minutes.

(c) Brightness set to maximum(255), Contrast set to minimun (0). full white pattern, Degauss with external degaussing coil.

(d) Select "User's Color" icon to enter color temperature alignment page, adjust B-cutoff, G-cutoff, R-cutoff to monimum (0).

(e) Then adjust FBT Screen VR and B-cutoff, G-cutoff, R-cutoff to make Y= 1 ± 0.5 FL, x = .313 ± . 010, y = .329 ± .010 .

B. Gain (High light) adjustment:

(a) Set mode 1 640 x 480 Fh: 31.5KHz 3" widow white pattern.

(b) Brightness set to raster just cutoff and set the cantrast to 5 ~ 10 FL.

(c) Adjust Green Driver, Red Driver to make color code x=.313 ± .010, y=.329 ± .010. Y= 5 ~ 10 FL.

C. Return to main OSD page, select " Information " icon, then short TP2 to ground..

D. Return to main OSD page, select the fourth instruction icon, press to enter to save to 6500°K Color Mode.

E. Repeat Item A, B & C

F. Return to main OSD page, select the third instruction icon, press to enter to save to 9300°K Color Mode.

G. Full white luminance:

(a) Set mode 1 640 x 480 Fh: 31.5KHz full white pattern.

(b) Image Size : H:300±3mm V:230±3mm.

(c) OSD page, select "9300K Color" icon. Change to 3" Window white pattern and adjust VR401 to make sure white luminance at 35 ~ 40 FL.

(d) Change to Full White pattern , Adjust VR801 to make sure luminance at 25 ~ 30 FL.

4. Focus Adjustment:

A. Set mode 5 , 800 × 600 , Fh: 46.8 KHz with character full page.

B. Adjust Brightness to raster just cut-off and Contrast to max. , then adjust focus VR to make the display be focused very well.

5. Purity Adjustment

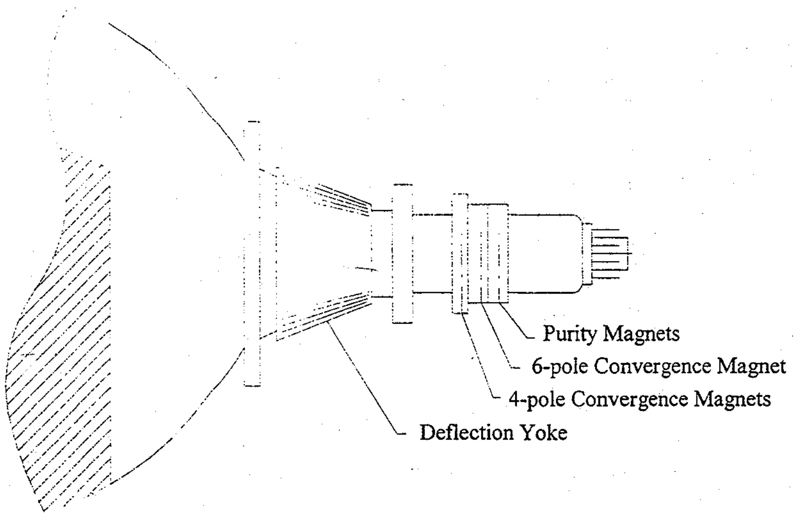
A. Be sure that the display is not being exposed to any external magnetic fields.

B. Ensure that the spacing between the Purity, Convergence, Magnet, (PCM), assembly and the CRT stem is 29mm .(See below diagram)

C. Produce a complete, red pattern on the display. Adjust the purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180°.

D. Check the complete blue and complete green patterns to observe their respective color purity. Make minor adjustments if needed.

RELATIVE PLACEMENT OF TYPICAL COMPONENTS



6. Convergence Adjustment

A. Produce a magenta crosshatch on the display.

B. Adjust the focus for the best overall focus on the display.
Also adjust the brightness to the desired condition.

C. Vertical red and blue lines are converged by varying the angle between the two tabs of the 4 pole magnets on the PCM assembly. (See above diagrams)

D. Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.

E. Produce a white crosshatch pattern on the display.

F. Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.

G. Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

5. CIRCUIT DESCRIPTION

5-1 MICRO CONTROL CIRCUIT

IC101 is CPU, This CPU has the following functions.

1. Detect timing mode by sensing the Horizontal frequency, Vertical frequency, the polarity of Hor. Sync and Ver. Sync.
2. Encoder scan control
3. OSD display control
4. Geometry and color temperature control
5. Cs capacitor switch control
6. Power saving control
7. Power alignment
8. DDC function built in
9. Test point 2 for manual save

Cs Capacitor Switch Point

FREQ	PIN 18 Cs 5	PIN 19 Cs 4	PIN 20 Cs 3	PIN 21C Cs 0	PIN 22 Cs 1	PIN 23 Cs 2
31K	L	L	L	L	H	H
37K	L	H	H	H	H	H
46K	L	H	H	H	L	H
53K	L	L	L	H	L	L
60K	L	H	L	H	L	L
68K	H	L	H	H	L	L
69K	H	H	H	H	L	L

Power Saving Status

STATUS	PIN 26 PSO	PIN 27 PSI
NORMAL MODE	H	H
STAND-BY MODE	H	L
SUSPEND MODE	H	L
OFF MODE	L	L
STAND-BY POWER	L	L

When CPU detects a timing, it takes data from E_2 PROM (IC103), then output PWM convert to DC voltage to control the geometry and color temperature of this monitor.
If Encoder is moved, the CPU will do some job according to the encoder function. For example, if EXIT key is pressed, CPU will instruct the OSD chip (IC105) to output on the screen of the monitor.

5-2 DEFLECTION CIRCUIT

Horizontal sync and vertical sync processor buffer (IC104) output flows into the CPU (IC101) to process. Then send to the H/V processor (IC801), IC801 treats sync signal and output the drive signal to Horizontal and Vertical output circuit, IC801 also generates some waveforms for geometry use, like pincushion, trapezoid, horizontal phase, vertical size, parallelogram, side-pin balance. By DC voltage control, the geometry can be controlled. IC601 is a vertical output IC to supply the vertical scan.
Q819, Q824 and Q822 are horizontal size control transistors. Q817, Q818 and Q820 are MOSFET to switch the Cs capacitor. Q813, Q814 and Q815 are double focus waveform amplifiers. T803 converts the waveform of double focus nd coupling to FBT (T801). IC802 is operated of high voltage regulation. Q801 is horizontal deflection output transistor to switch. Q829 and Q826 generate the blanking signal to G1 of CRT. Q810 and Q808 are for brightness control and G1 DC voltage output.

5-3 VIDEO CIRCUIT

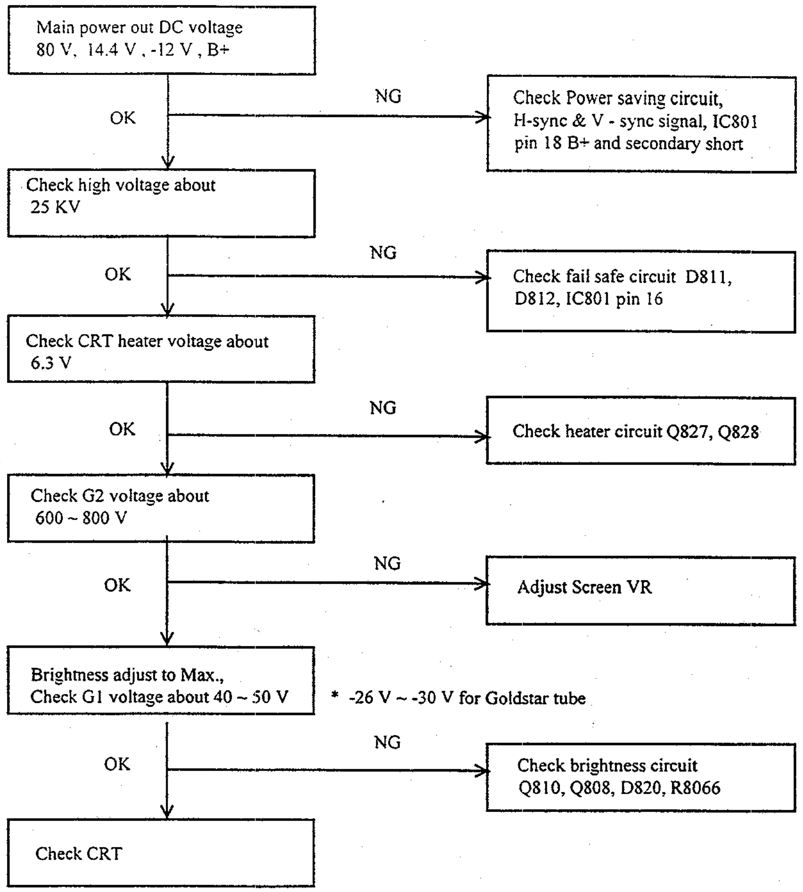
IC401 is a video amplifier, clamp signal input to Pin 15 to restore the DC voltage of video signal. The signal output from IC401 pass through cascade amplifier stage Q404, Q405, Q406, Q701, Q703 and Q706, then go to the cut off DC voltage restore stage Q702, Q704 and Q707. Q708, Q709 and Q710 are used for R, G, B cut off adjusting. Amplitude of video output signal is about 40 Vpp.

5-4 POWER SUPPLY

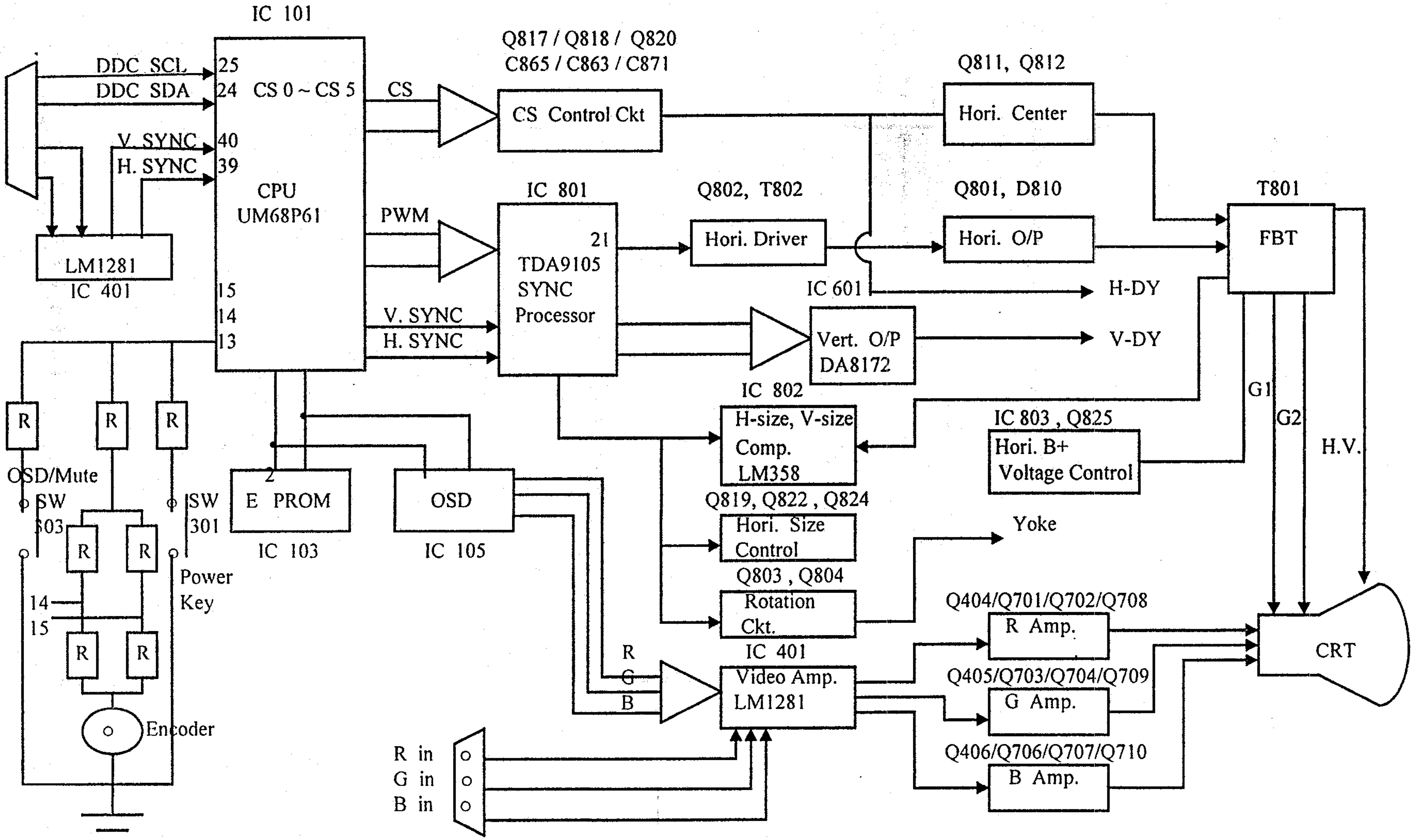
The design uses a discontinuous flyback topology operating in current - mode resulting in a multiple output switched with stack well. The fast transient response of the control loop maintains pictue integrity very fast current limiting protects the switched again short circuits.
UC3842AM (IC901) is the current mode controller selected. It offers feed forward compensation feedback error amplifier, and low voltage lock out features. the 3842 draws very little current on start up mode. there is enough power from the line bleeder to slowly charge a capacitor to the 17 volts need to start the switch.
The FET starts a cycle by allowing current to flow into the photocouple (IC902). As current ramp up with time, the voltage across the current sense resistor (R916), also ramps to a point where the 3842 determines that enough power is stored and turns of the FET. As the voltage on the transformer reverses, power is dumped from the main power transformer through diodes in to the different supplies. To keep RFI to a minimum and reduce transistor heating, a turn-off snubber network is placed across the FET. Current from the secondary windings are rectified and filtered to obtain the desired voltage. Small high current capacitors quickly return charging current to the source. Filter inductors remove high frequency noise. (Test point 3 to be used to adjust B+ 16.1 V)

8.TROUBLE SHOOTING CHART

8-1 NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS

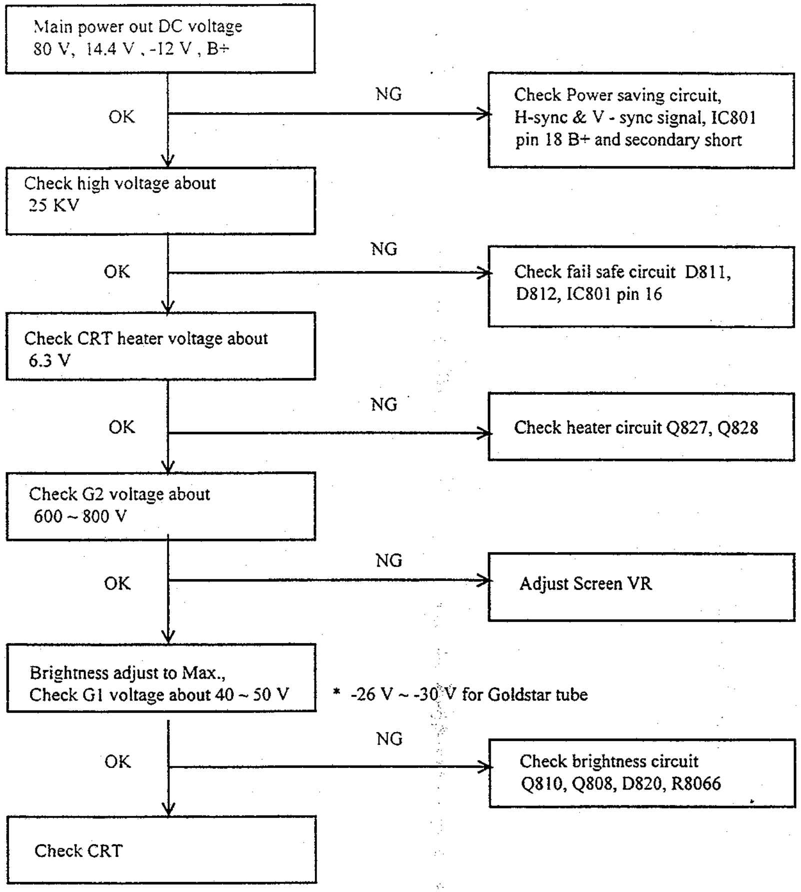

Main power out DC voltage
80 V, 14.4 V , -12 V , B+
OK
NG
Check Power saving circuit,
H-sync & V - sync signal, IC801
pin 18 B+ and secondary short
Check high voltage about
25 KV
OK
NG
Check fail safe circuit D811,
D812, IC801 pin 16
Check CRT heater voltage about
6.3 V
OK
NG
Check heater circuit Q827, Q828
Check G2 voltage about
600 ~ 800 V
OK
NG
Adjust Screen VR
Brightness adjust to Max.,
Check G1 voltage about 40 ~ 50 V
* -26 V ~ -30 V for Goldstar tube
OK
NG
Check brightness circuit
Q810, Q808, D820, R8066
Check CRT

7. BLOCK DIAGRAM


IC 101
DDC SCL
DDC SDA
V. SYNC
H. SYNC
25
24
CS 0 ~ CS 5
40
39
CPU
UM68P61
15
14
13
LM1281
IC 401
CS
PWM
V. SYNC
H. SYNC
Q817 / Q818 / Q820
C865 / C863 / C871
CS Control Ckt
IC 801
21
TDA9105
SYNC
Processor
Q802, T802
Hori. Driver
Q811, Q812
Hori. Center
Q801, D810
Hori. O/P
T801
FBT
H-DY
IC 601
Vert. O/P
DA8172
V-DY
IC 802
H-size, V-size
Comp.
LM358
IC 803 , Q825
Hori. B+
Voltage Control
G1
G2
H.V.
Q819, Q822 , Q824
Hori. Size
Control
Yoke
Q803 , Q804
Rotation
Ckt.
R
R
R
OSD/Mute
SW
303
SW
301
R
R
14
15
R
R
Power
Key
Encoder
2
E PROM
IC 103
OSD
IC 105
R
G
B
IC 401
Video Amp.
LM1281
R in
G in
B in
Q404/Q701/Q702/Q708
R Amp.
Q405/Q703/Q704/Q709
G Amp.
Q406/Q706/Q707/Q710
B Amp.
CRT

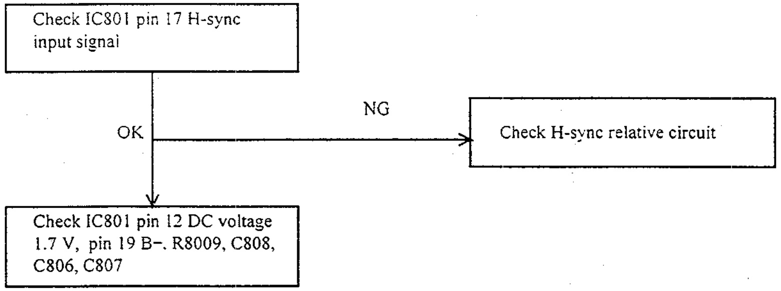
8.TROUBLE SHOOTING CHART

8-1 NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS

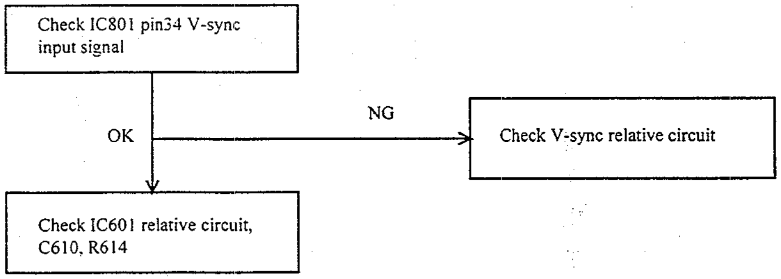

Main power out DC voltage 80 V, 14.4 V, -12 V, B+
OK
NG
Check Power saving circuit, H-sync & V - sync signal, IC801 pin 18 B+ and secondary short
Check high voltage about 25 KV
OK
NG
Check fail safe circuit D811, D812, IC801 pin 16
Check CRT heater voltage about 6.3 V
OK
NG
Check heater circuit Q827, Q828
Check G2 voltage about 600 ~ 800 V
OK
NG
Adjust Screen VR
Brightness adjust to Max., Check G1 voltage about 40 ~ 50 V
OK
NG
Check brightness circuit Q810, Q808, D820, R8066
Check CRT

* -26 V ~ -30 V for Goldstar tube

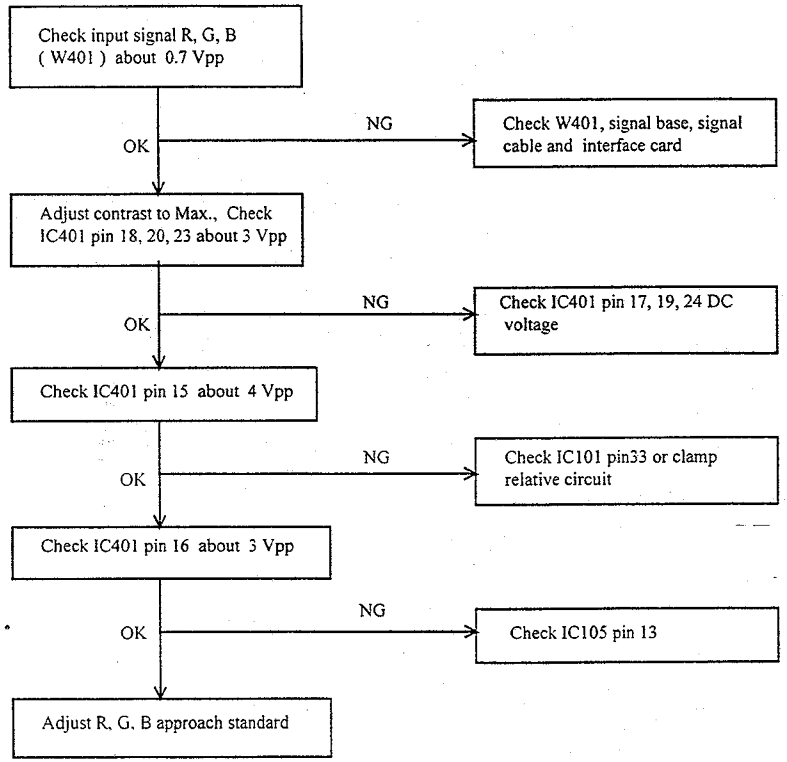
8-2. HORIZONTAL VIDEO UNSTABLE


Check IC801 pin 17 H-sync input signal
OK
NG
Check H-sync relative circuit
Check IC801 pin 12 DC voltage 1.7 V, pin 19 B+, R8009, C808, C806, C807

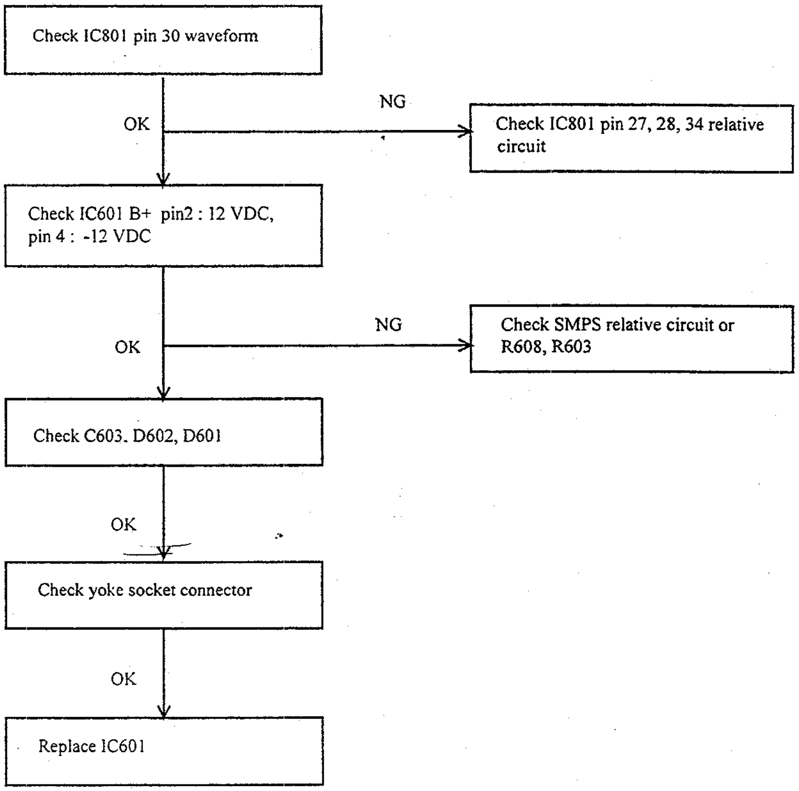
8-3. VERTICAL VIDEO UNSTABLE


Check IC801 pin34 V-sync input signal
OK
NG
Check V-sync relative circuit
Check IC601 relative circuit, C610, R614

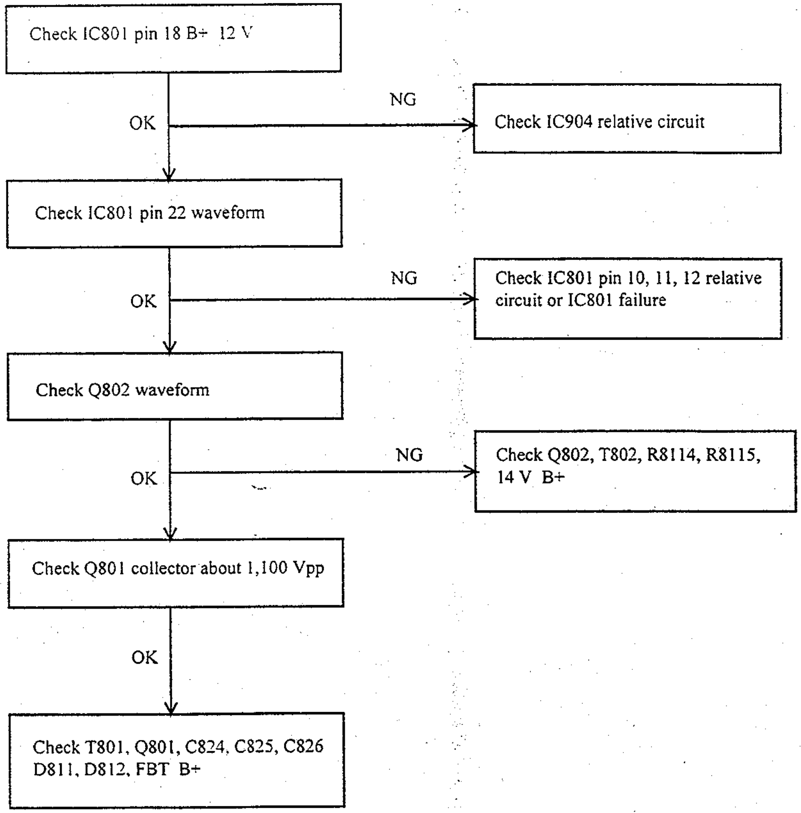
8-4. VIDEO UNSTABLE


Check input signal R, G, B (W401) about 0.7 Vpp
OK
NG
Check W401, signal base, signal cable and interface card
Adjust contrast to Max., Check IC401 pin 18, 20, 23 about 3 Vpp
OK
NG
Check IC401 pin 17, 19, 24 DC voltage
Check IC401 pin 15 about 4 Vpp
OK
NG
Check IC101 pin33 or clamp relative circuit
Check IC401 pin 16 about 3 Vpp
OK
NG
Check IC105 pin 13
Adjust R, G, B approach standard

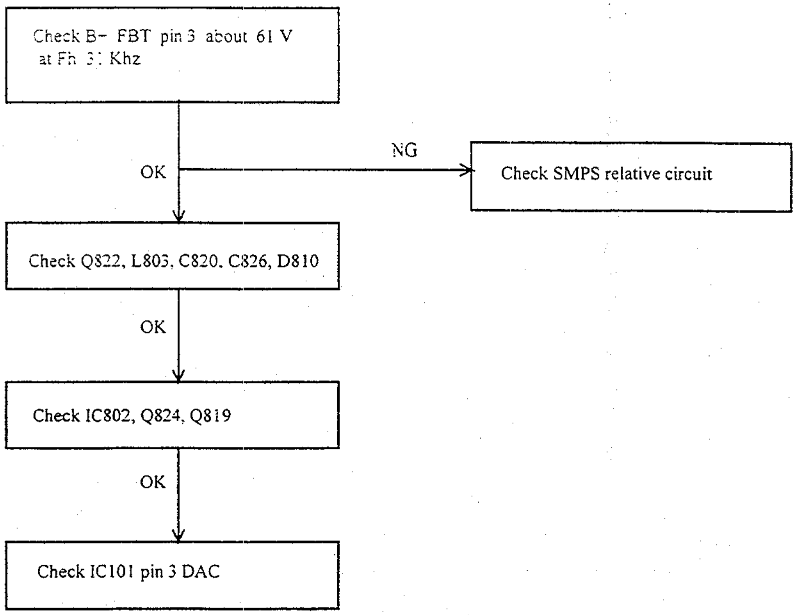
8-5 ABNORMAL VERTICAL SCANNING


Check IC801 pin 30 waveform
OK
NG
Check IC801 pin 27, 28, 34 relative circuit
Check IC601 B+ pin2 : 12 VDC, pin 4 : -12 VDC
OK
NG
Check SMPS relative circuit or R608, R603
Check C603, D602, D601
OK
Check yoke socket connector
OK
Replace IC601

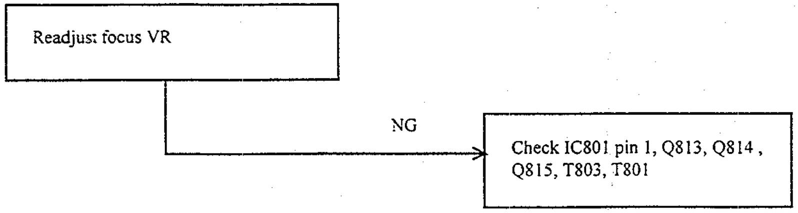
8-6 HOR/OSC/DEF/HV CIRCUIT FAULT


Check IC801 pin 18 B+ 12 V
OK
NG
Check IC904 relative circuit
Check IC801 pin 22 waveform
OK
NG
Check IC801 pin 10, 11, 12 relative circuit or IC801 failure
Check Q802 waveform
OK
NG
Check Q802, T802, R8114, R8115, 14 V B+
Check Q801 collector about 1,100 Vpp
OK
Check T801, Q801, C824, C825, C826 D811, D812, FBT B+

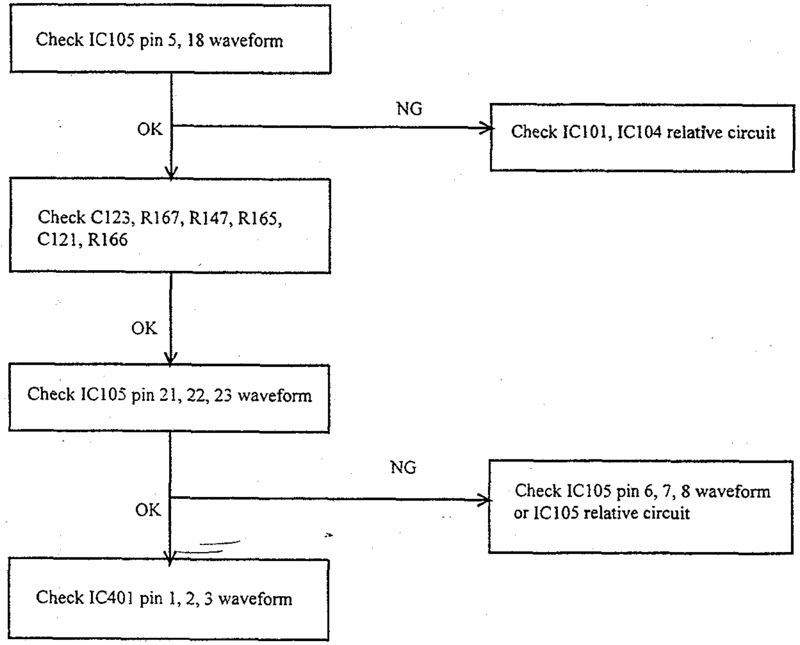
8-7 ABNORMAL HORIZONTAL WIDTH


Check B+ FBT pin 3 about 61 V at Fh 31 Khz
OK
NG
Check SMPS relative circuit
Check Q822, L803, C820, C826, D810
OK
Check IC802, Q824, Q819
OK
Check IC101 pin 3 DAC

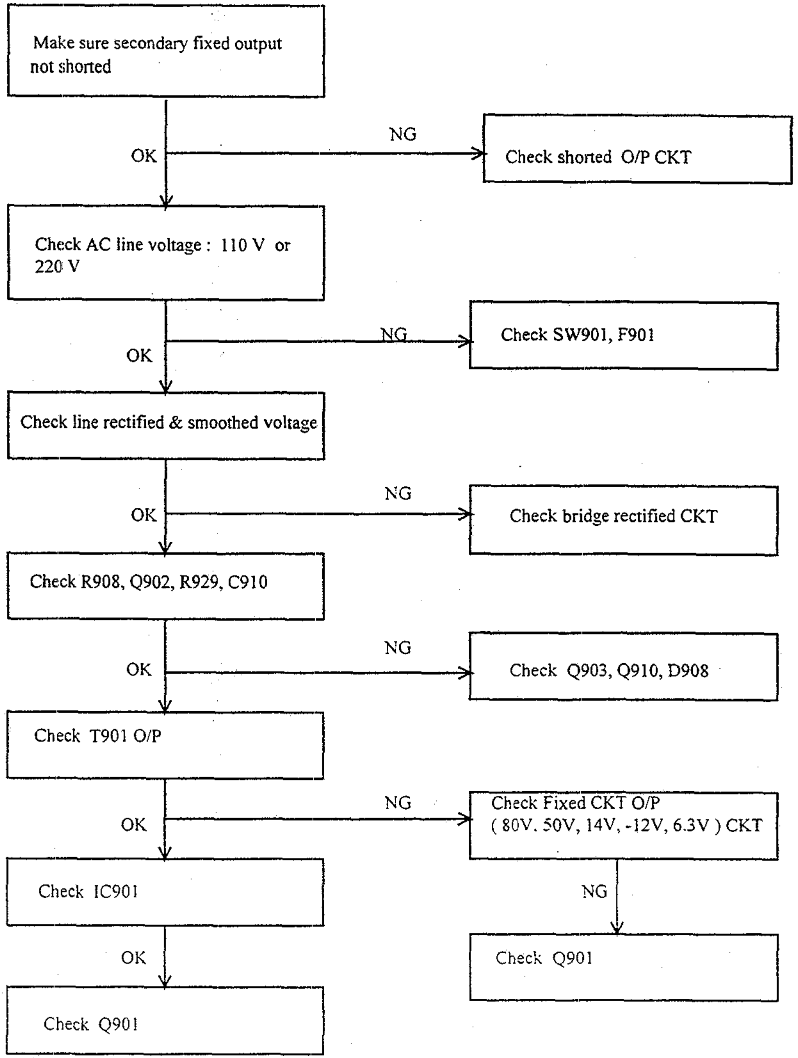
8-8 POOR FOCUS


Readjust focus VR
NG
Check IC801 pin 1, Q813, Q814, Q815, T803, T801

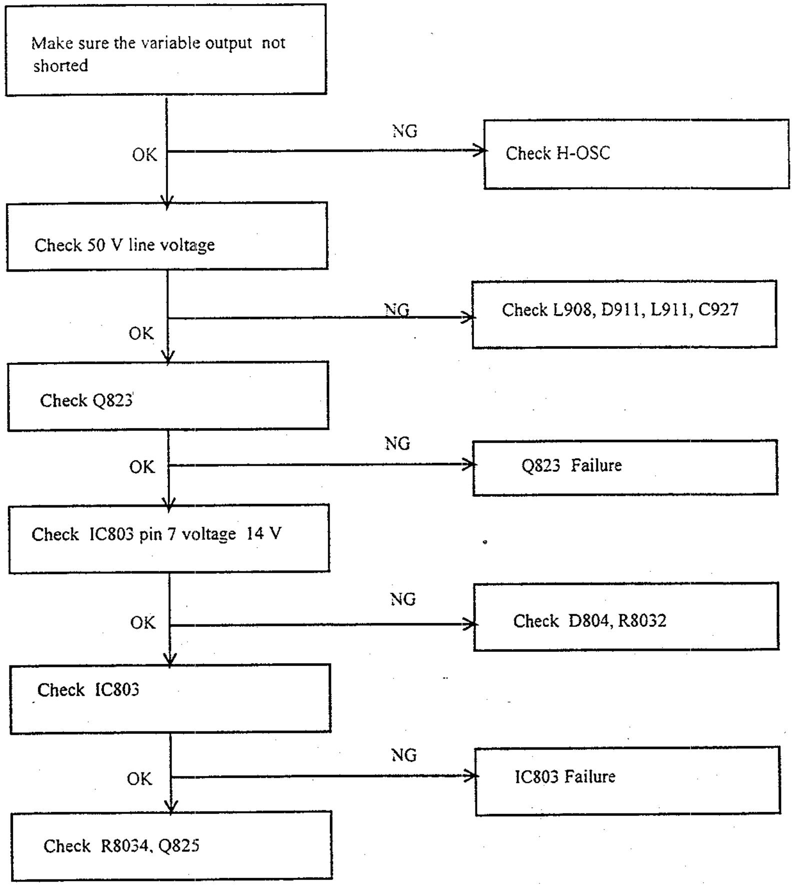
8-9 ABNORMAL OSD DISPLAY

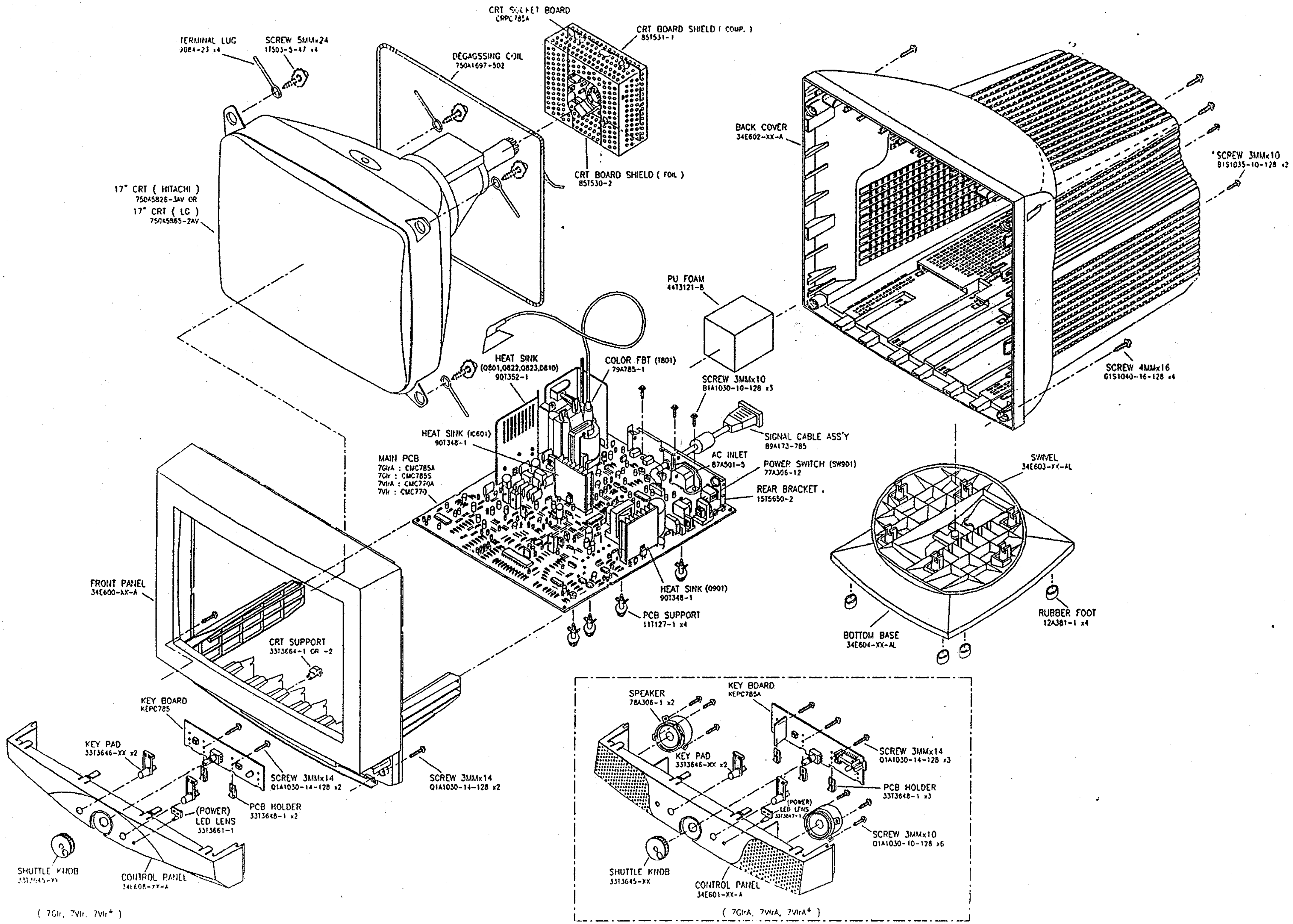

Check IC105 pin 5, 18 waveform
OK
NG
Check IC101, IC104 relative circuit
Check C123, R167, R147, R165, C121, R166
OK
Check IC105 pin 21, 22, 23 waveform
NG
OK
Check IC105 pin 6, 7, 8 waveform or IC105 relative circuit
Check IC401 pin 1, 2, 3 waveform

8-10 ABNORMAL POWER SUPPLY


Make sure secondary fixed output not shorted
OK
NG
Check shorted O/P CKT
Check AC line voltage : 110 V or 220 V
NG
OK
Check SW901, F901
Check line rectified & smoothed voltage
OK
NG
Check bridge rectified CKT
Check R908, Q902, R929, C910
OK
NG
Check Q903, Q910, D908
Check T901 O/P
OK
NG
Check Fixed CKT O/P (80V. 50V, 14V, -12V, 6.3V) CKT
NG
Check IC901
OK
Check Q901
Check Q901

8-11 ABNORMAL B+ VOLTAGE


Make sure the variable output not shorted
OK
NG
Check H-OSC
Check 50 V line voltage
NG
Check L908, D911, L911, C927
OK
Check Q823
NG
OK
Q823 Failure
Check IC803 pin 7 voltage 14 V
NG
OK
Check D804, R8032
Check IC803
NG
OK
IC803 Failure
Check R8034, Q825


CRT SOCKET BOARD
CRPC785A
CRT BOARD SHIELD (COMP.)
85T531-1
TERMINAL LUG
30B4-23 x4
SCREW 5MMx24
11S03-5-47 x4
DEGAGSSING COIL
750A1697-502
CRT BOARD SHIELD (FOIL)
85T530-2
17" CRT (HITACHI)
750A5826-3AV OR
17" CRT (LG)
750A5865-2AV
BACK COVER
34E602-XX-A
SCREW 3MMx10
B1S1035-10-128 x2
PU FOAM
44T3121-8
SCREW 4MMx16
G1S1040-16-128 x4
HEAT SINK
(Q801,Q822,Q823,Q810)
90T352-1
COLOR FBT (T801)
79A785-1
SCREW 3MMx10
B1A1030-10-128 x3
HEAT SINK (IC601)
90T348-1
SIGNAL CABLE ASS'Y
89A173-785
MAIN PCB
7GIrA : CMC785A
7GIr : CMC785S
7VIrA : CMC770A
7VIr : CMC770
AC INLET
87A501-5
POWER SWITCH (SW901)
77A306-12
REAR BRACKET
15T5650-2
SWIVEL
34E603-XX-AL
HEAT SINK (Q901)
90T348-1
PCB SUPPORT
11T127-1 x4
RUBBER FOOT
12A381-1 x4
BOTTOM BASE
34E604-XX-AL
FRONT PANEL
34E600-XX-A
CRT SUPPORT
33T3664-1 OR -2
KEY BOARD
KEPC785
KEY PAD
33T3646-XX x2
SCREW 3MMx14
Q1A1030-14-128 x2
SCREW 3MMx14
Q1A1030-14-128 x2
PCB HOLDER
33T3648-1 x2
(POWER)
LED LENS
33T3661-1
SHUTTLE KNOB
33T3645-XX
CONTROL PANEL
34E608-XX-A
(7GIr, 7VIr, 7VIr+)
SPEAKER
78A306-1 x2
KEY BOARD
KEPC785A
KEY PAD
33T3646-XX x2
SCREW 3MMx14
Q1A1030-14-128 x3
PCB HOLDER
33T3648-1 x3
(POWER)
LED LENS
33T3647-1
SCREW 3MMx10
Q1A1030-10-128 x6
SHUTTLE KNOB
33T3645-XX
CONTROL PANEL
34E601-XX-A
(7GIrA, 7VIrA, 7VIrA+)

8. MECHANICAL OF CABINET DIS-ASSEMBLY

10. PARTS LISTING

PARTS LIST OF CABINET

Location	S785JEOSP / S785JEWSP S770JCOSP / S770JCWSP S770JBOSP / S770JBWSP	Specification (Low Radiation 120V/220V)
	CMC785 / CMC785A / CMC770 / CMC770A	Chas (7Glr / 7GlrA / 7Vlr+ / 7VlrA+ / 7Vlr / 7VlrA)
	1A-503- 5-47	Screw (MTG CRT)
	5A- 38- 8	Rubber washer
	9A- 84- 20	Steel (MTG DEG Coil = 4P)
	12A-381- 1	Rubber foot
	12A-383- 1	MIC Holder Rubber (For CMC785A/770A)
	19A-403- 7	Steel
	26A-800-504	Bar-Code
	33A3278- 2	2P plug B2B-XHA/JST (For CMC785A/770A)
	33A3278- 3	3P plug B3B-XHA/JST (For CMC785A/770A)
	33A3645- 1	Encoder VR Knob
	33A3646- 1	Key pad
	33A3647- 1	Power LED Lens (For CMC785A/770A)
	33A3648- 1	PC holder
	33A3661- 1	Power LED Lens (For CMC785/770)
	33A3664- 1	CRT support
	33A3664- 2	CRT support (For Philips CRT)
	33A8009-10H	10 Pin L-Type Connector (CMC785A/770A)
	34A-600- 1- A	Front panel (7GlrA)
	34A-600- 2- A	Front panel (7Glr)
	34A-600- 3- A	Front panel (7VlrA)
	34A-600- 4- A	Front panel (7Vlr)
	34A-600- 5- A	Front panel (7VlrA+)
	34A-600- 6- A	Front panel (7Vlr+)
	34A-601- 1- A	Control panel (7GlrA/7VlrA/7VlrA+)
	34A-602- 1- A	Rear cabinet
	34A-603- 1-AL	Swival
	34A-604- 1-AL	Base
	34A-608- 1- A	Control panel (7Glr/7Vlr/7Vlr+)
	40A-153- 60	CRT Warning Label
	40A-155-033- 02	ID Label (7Glr)
	40A-155-034- 02	ID Label (7GlrA)
	40A-155-047- 01	ID Label (7Vlr)
	40A-155-048- 01	ID Label (7VlrA)
	40A-155-049- 01	ID Label (7Vlr+)
	40A-155-050- 01	ID Label (7VlrA)
	41A-401-875- 01	Ower's manual (7Glr/7GlrA)-USA
	41A-401-872- 02	Ower's manual (7Glr/7GlrA)-Europe
	41A-401-876- 01	Ower's manual (7Vlr series)-USA
	41A-401-877- 01	Ower's manual (7Vlr series)-Europe
	44A3121- 8	PU foam
	44A3176- 1	EPS cushion left
	44A3176- 2	EPS cushion right
	44A3176- 4	Carton
	45A- 76- 20- R	P.E.Film
	45A- 76- 28- R	Poly bag
	45A- 76- 34- R	Poly bag

	Location	S785 / S770	Specification
		50A-106- 1	Cable tie (MTG Cancel Coil DEG Coil)
		78A-306- 1	Speaker, 50mm 3W 8 ohm 50FR3CY IN-CHIEN
		89A-171- 25	Power cord - USA
		89A-173- 56- 4	Video Cable (7GlrA/7VlrA/7VlrA+)
		89A-173-785	Signal cable S785
		89A-498- 3	VDE power cord - Europe
		90A-355- 1	Heat Sink (7GlrA/7VlrA/7VlrA+)
		95A- 91-205-20	Copper braid & pin ASS'Y
		95A-205-300-62	Wire ASS'Y
		95A-800- 2- 2	UL105#18 YEL/GRN
		95A207R-301-52	UL105#18 / BLK Strand(MTG CRT B/CRT GND)
		95A8013- 2-21	Wire & Housing ASS'Y SP-R (7GlrA/7VlrA/7VlrA+)
		95A8013- 2-22	Wire & Housing ASS'Y SP-L (7GlrA/7VlrA/7VlrA+)
		95A8013- 2-23	Wire & Housing Ass'y Audio Out (7GlrA/7VlrA/7VlrA+)
	W102	95A8013- 3-19	Wire & Housing ASS'Y S785 W102
		95A8013- 3-20	Wire & Housing Ass'y MIC Out (7GlrA/7VlrA/7VlrA+)
	W403	95A8013- 5-10	Wire & Housing ASS'Y S785 W403
	W102	95A8013- 6-12	Wire & Housing ASS'Y S785 W102
	W101	95A8013- 7- 7	Wire & Housing ASS'Y S785 W101
		96A- 29- 6-190	H.S. Tubing
		G1A1035-10-128	Screw (MTG Rear / 15A5650 = 2P)
		G1A1040-16-128	Screw (MTG Bezel / Rear = 4P)
		Q1A1030-10-128	Screw (MTG Speaker = 6P)
		Q1A1030-14-128	Screw (MTG KEPC = 3P)
		Q1A1030-14-128	Screw (MTG 34A600 / 601 = 2P))
		Q1A1040-16-128	Screw (MTG Bezel / Rear = 4P)
	L401	750A1697-501	Rotation coil
!	CRT	750A1697-502	Degaussing coil
	CRT	750A5826-3AV	M41KSX683X74 (T) Hitachi H/C for 7Glr/7GlrA
	CRT	750A5865-2AV	M41QAY813X05 (LA) DP 0.26 L/G for 7Glr/7GlrA
	CRT	750A5861-1AV	M41LFQ803X05 DP 0.28 L/G fir 7Vlr/7VlrA
	CRT	750A5866-1AV	M41LFQ803X05 (LA) DP 0.28 L/G fir 7Vlr/7VlrA/7Vlr+/7VlrA+
	CRT	750A5840-2AV	M41EHN323X140/2F07E Philips DP 0.27 for 7Vlr/7VlrA
	CRT	750A5845-3AV	M41EHN325X140/2F07E Philips DP 0.27 for 7Vlr+/7VlrA+

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! **listing with shadow block are critical parts**

PARTS LIST OF CHAS

Location	CMC785S / CMC785A CMC770S/CMC770A	Specification
	CMP785S/CMC785A	Main PC Board
	CRPC785S/CRPC785A	CRT Board
	KEPC785S/KEPC785A	Key Board
	5A- 42- 1	Nylon (MTG 57A600-6)
	9A- 203- 8	Brass
	11A-127- 1	PCB support
	12A-372- 1	Silicon Rubber (MTG 57A600-6)
	12A-383- 1	MIC holder rubber (CMC785A/770A)
	15A5640- 1-A	Bracket
	15A5650- 1	Rear bracket (7Glr/7Vlr/7Vlr+)
	15A5650- 2	Rear bracket (7GlrA/7VlrA/7VlrA+)
	15A5658- 1	Bracket
	71A 100- 2	Ferrite K70 T 16x8x12 King Cord (Focus & G2)
	77A 600- 1	Tact switch HORI TYP SKHHAK251
	84A 33- 10	Fuse clip FC04 (Jeng Hsing)
	85A 530- 2	Shield
	85A 531- 1	CRT PCB Shield (COMP)
	87A 501- 5	Receptacles 0714 Inalways
	87A3504- 2	17" D.F. CRT socket 033 0 7700
	90A 306- 1	Heat sink
	90A 310-510-A	Heat sink
	90A 348- 1	Heat sink ver
	90A 352- 1	Heat sink
	90A 356- 1	Heat sink
	95A 205-300-52	95S205-30 5"S : 6x6 MM (GND 7 to GND 8)
	95A205T-300-2T	95S205-30 & 9A206-13x2 (W2 AC Inlet / 90a352)
	95A205T-300-62	UL1015#18BLK.Topcoat (W1 to CRT SHIELD)
	95A3193- 1- 3	Wire & Plug Ass"y (GND A & GND B)
	715A 606- 1	S785 Main BRD
	715A 608- 1	S785 Contrrol BRD
	B1A1030- 8-128	Screw (MTG 15A5650/CMP = 1P)
	B1A1030- 8-128	Screw (MTG GND / 15A5650 = 1P)
	B1A1030- 8-128	Screw (MTG GND / 15A5650 / 90A352)
	B1A1030-10-128	Screw (MTG AC LINET = 2P)
	G1A1040- 8-128	Screw 4X8 (MTG HOT = 1P)
	M1A1040-10-128	Screw (MTG 15A5640 / 5658 = 1P)
	M1A1140- 6-128	Screw (MTG AC GND / 15A5650)
	M1A1730- 8-128	Screw (Q701 / 703 / 706 / D810 / --
	M1A1730- 8-128	Screw (MTG Q817 / 818 / 828 = 3P)
	M1A1730- 8-128	Screw (MTG 57A600-6)
	M1A1730-10-128	Screw M3X10 (Q801 / 822 /823 /PWR = 4P)
C101	67A 301-100- 7T	10UF + -20% 50V
C102	67A 301-100- 7T	10UF + -20% 50V
C103	67A 301-100- 7T	10UF + -20% 50V
C105	67A 301-100- 7T	10UF + -20% 50V
C106	65A 450-220- 4T	22PF 50V Z5V CC
C107	65A 450-220- 4T	22PF 50V Z5V CC
C108	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic

Location	CMC785 / CMC770	Specification
C109	67A 301-221- 4T	220UF 25V 85C
C110	65A 450-101- 5T	100PF 50V Y5P CC
C111	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C112	67A 301-100- 7T	10UF + -20% 50V
C113	67A 301-100- 7T	10UF + -20% 50V
C114	67A 301-100- 7T	10UF + -20% 50V
C115	67A 301-100- 7T	10UF + -20% 50V
C117	67A 301-100- 7T	10UF + -20% 50V
C118	67A 301-100- 7T	10UF + -20% 50V
C119	67A 301-100- 7T	10UF + -20% 50V
C120	67A 301-100- 7T	10UF + -20% 50V
C121	64A176J-472- 0T	.0047UF + -5% 50/63V
C122	65A 442-101- 4T	100PF 50W Z5V 5%
C123	64A- 177- 5-58T	0.0022UF J 50V
C124	67A 301-100- 7T	10UF + -20% 50V
C125	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C126	67A 301-101- 7T	100UF + -20% 50V
C128	67A 301-100- 7T	10UF + -20% 50V
C129	67A 301-100- 7T	10UF + -20% 50V
C130	67A 301-100- 7T	10UF + -20% 50V
C131	67A 301-100- 7T	10UF + -20% 50V
C132	67A 301-100- 7T	10UF + -20% 50V
C133	67A 301-100- 7T	10UF + -20% 50V
C134	67A 301-100- 7T	10UF + -20% 50V
C135	67A 301-100- 7T	10UF + -20% 50V
C401	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C402	67A 301-109- 7T	1UF + -20% 50V
C404	67A 301-109- 7T	1UF + -20% 50V
C405	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C406	67A 301-101- 3T	100UF + -20% 16V
C407	67A 301-109- 7T	1UF + -20% 50V
C408	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C409	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C410	67A 301-101- 4T	100UF + -20% 25V
C411	65A 450-104- 4T	0.1UF +80 - 20% Z5V50V
C412	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C413	65A 442-101- 1T	100PF J NPO 50W
C414	65A 442-101- 1T	100PF J NPO 50W
C417	65A 442-680- 1T	68PF J NPO 50V
C418	67A 301-109- 7T	1UF + -20% 50V
C419	67A 301-109- 7T	1UF + -20% 50V
C420	67A 301-101- 3T	100UF + -20% 16V
C421	65A 442-470- 1T	47PF J NPO 50V
C422	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C423	65A 442-680- 1T	68PF J NPO 50V
C424	67A 301-109- 7T	1UF + -20% 50V
C425	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C426	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C427	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C428	65A 450-104- 7T	1UF 50V +80% -20% Y5V Ceramic
C429	67A 301-221- 3T	220UF + -20% 16V

Location	CMC785 / CMC770	Specification
C577	64A100J-225-59	2.2UF 100V 5% MPE CAP.
C601	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C602	67A 301-102- 4T	1000UF 25V 85C
C603	67A 301-101- 6T	100UF + -20% 35V
C604	67A 301-102- 3T	1000UF + -20% 16V
C605	64A176J-224- 0T	0.22UF 5% 63V
C606	64A- 177- 5-58T	0.0022UF J 50V
C607	67A 301-479- 7T	4.7UF + -20% 50V
C608	67A 301-101- 4T	100UF + -20% 25V
C609	64A176J-474- 0T	0.47UF 5% 63V ME
C610	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C611	64A176J-224- 0T	.22UF + -5% 50/63V
C613	64A- 177- 13-58T	0.01UF J 50V
C801	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C802	64A176J-103- 0T	.01UF + -5% 50/63V
C803	65A 442-101- 1T	100PF J NPO 50V
C805	67A 301-101- 3T	100UF + -20% 16V
C806	64A- 177- 54- 57	.047UF 100V 5% Polyester film
C807	64A- 177- 54- 57	.047UF 100V 5% Polyester film
C808	64A- 177- 1- 58T	0.001UF 50V Polyester film
C809	64A176J-224- 0T	.22UF + -5% 50/63V
C810	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C811	67A 301-470- 4T	47UF + -20% 25V
C812	64A176J-473- 0T	.047UF + -5% 50/63V
C813	67A 301-100- 7T	10UF + -20% 50V
C814	67A 301-470- 4T	47UF + -20% 25V
C815	67A 301-470- 4T	47UF + -20% 25V
C816	67A 301-101- 3T	100UF + -20% 16V
C817	67A 301-221- 3T	220UF + -20% 16V
C818	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C819	65A 442-101- 1T	100PF J NPO 50V
C820	64A100J-335-59T	3.3UF 100V 5% MPE EPOXY
C821	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C822	67A 301-100- 7T	10UF + -20% 50V
C823	64A176J-223- 0T	0.022UF + -5% 50/63V
C824	63A210J-562-7MM	5600PF 1600V 5% PDS by Mylar
C824	63A210J-622-7MM	6200PF 1600V 5% PDS by Mylar (For Philips CRT only)
C825	64A 140- 91-64	.047UF 630V 5% PP Film
C826	64A 140-114-64	.0056UF 800V Polypropylene 5%
C826	64A 140-113-64	.0062UF 800V Polypropylene 5% (For Philips CRT only)
C827	67A 301-101- 4T	100UF + -20% 25V
C828	67A 301-101- 4T	100UF + -20% 25V
C829	67A 301-101-12	100UF 250V 85C
C832	67A 301-479-12T	4.7UF 250V 85C
C833	64A176J-103- 1T	.01UF 50/63V 5%
C834	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C835	67A 301-102- 3T	1000UF + -20% 16V
C836	67A 301-101- 3T	100UF + -20% 16V
C837	67A 301-109-12T	1UF 250V 85C
C838	64A176J-474- 0T	.47UF + -5% 50/63V
C840	67A 301-100- 7T	10UF + -20% 50V

Location	CMC785 / CMC770	Specification
C841	64A- 177- 5-58T	0.0022UF J 50V
C842	65A 444-102- 5T	1000PF 10% 50V Ceramic
C843	64A176J-474- 0T	0.47UF 5% 63V ME
C844	64A- 177- 5-58T	0.0022UF J 50V
C845	67A 301-478-12T	.47UF + -20% 250V
C846	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C847	67A 301-470- 4T	47UF + -20% 25V
C848	64A- 177- 25-58	0.1UF J 50V
C849	65A517K-103-1A	10000PF Z5F 500V
C850	65A 442-102- 1T	1000PF 5% 50W NPO
C851	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C852	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C853	65A 1Z-102- 3A	1000PF 1KV Z5U Ceramic
C854	65A 1Z-102- 3A	1000PF 1KV Z5U Ceramic
C855	64A176J-224- 2T	0.22UF 200V/250V 5% MP
C856	65A 1Z-102- 3A	1000PF 1KV Z5U Ceramic
C857	67A 301-109- 15T	1UF 450V 85C
C858	65A 1K-221- 2A	220PF 10% Z5P 1KV
C859	63A210J-154-3DM	0.15UF 400V PMH type Mylar
C860	63A210J-474-2MM	0.47UF 250V 5% PMH Mylar
C861	65A 1K-221- 2A	220PF 10% Z5P 1KV
C862	63A210J-104-3DM	0.1 UF 5% 400V PMH by Mylar
C863	63A210J-104-3DM	0.1 UF 5% 400V PMH by Mylar
C864	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C865	63A210J-224-3DM	0.22UF 400V 5% PMH by Mylar
C866	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C867	63A210J-564-2DM	0.56UF 250V 5% PMH by Mylar
C868	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C869	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C870	67A 301-470- 9T	47UF 100V 85C E.C.
C871	63A210J-334-2CM	0.33UF 5% 250V PMH by Mylar
C872	64A176J-474- 0T	0.47UF 5% 63V ME
C873	67A 60-100- 4	10UF + -20% 25V Non-polar EC
C874	64A- 177- 13-58T	0.01UF J 50V
C875	64A- 177- 5-58T	0.0022UF 50V 5% Polyster
C876	67A 305-470--7T	47UF + -20% 50V 105 C
C877	64A176J-225- 1T	2.2UF 5% 100V
C878	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C879	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C881	67A 60-229- 9	2.2UF 100V Non-P EC
C883	64A176J-102- 0T	1000PF + -5% 50/63V
C884	65A517K-103- 1A	10000PF Z5F 500V
C903	63A- 107-224- 5	0.22 UF 20% by Teapo
C904	65A305M-472-2B	4700PF 20% 400VAC DE7150F472MV
C905	65A305M-472-2B	4700PF 20% 400VAC DE7150F472MV
C906	63A- 107-104- 5	0.1 UF 20% by Teapo
C907	67A 30-331- 14	330UF + -20% 400V
C908	65A 1Z-103- 3B	0.01UF 1KV
C909	67A 301-479- 7T	4.7UF + -20% 50V
C910	67A 301-101- 4T	100UF + -20% 25V
C912	64A176J-102- 0T	1000PF + -5% 50/63V

Location	CMC785 / CMC770	Specification
C913	65A 444-471- 5T	470PF 10% 50V Y5P
C914	64A176J-104- 0T	.1UF + - 5% 50/63V
C916	67A 301-100- 4T	10UF + -20% 25V
C918	65A305M-472- 2B	4700PF 20% 400VAC DE7150F472MV
C921	64A176J-332- 0T	3300PF 5% 50V/63V
C922	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C923	65A 1K-101- 5A	100P 1KV Ceramic
C924	67A 301-470- 10	47UF 160V 85C (CMC785/770)
C925	65A 517-103- 3A	0.01UF 500V Z5V Ceramic
C926	65A 1K-221- 2A	220PF 10% Z5P 1KV
C927	67A 301-102- 8	1000UF 63V 85C (CMC785/770)
C928	65A 517-103- 3A	0.01UF 500V Z5V Ceramic
C929	67A 301-222- 4T	2200UF 25V 85C
C930	67A 301-221- 4T	220UF 25V 85C
C931	65A 444-331- 5T	330P Ceramic CAP
C932	67A 301-102- 3T	1000UF + -20% 16V
C934	64A176J-104- 0T	.1UF + - 5% 50/63V
C935	67A 301-102- 3T	
C936	65A 450-104- 7T	.1UF 50V +80% -20% Y5V Ceramic
C937	67A 301-221- 3T	220UF + -20% 16V
C938	67A 301-109- 7T	1UF + -20% 50V
C939	64A176J-472- 0T	.0047UF + -5% 50/63V
C940	67A 301-221- 4T	220UF 25V 85C
C941	65A 450-104- 4T	0.1UF +80 - 20% Z5V50V
CX101	93A 22- 22	8.0000 MHZ/S.P.K
D101	93A 64- 11-52T	Diode 1N4148
D102	93A 64- 11-52T	Diode 1N4148
D401	93A 64- 11-52T	Diode 1N4148
D601	93A 60-106-52T	BYD33G
D602	93A 64- 11-52T	Diode 1N4148
D801	93A 60-105-52T	DINS-4060
D802	93A 60-105-52T	DINS-4060
D803	93A 64- 11-52T	Diode 1N4148
D804	93A 39- 82-52T	ZD HZ12A2/Hitachi HZ12A2/Hitac
D805	93A1100- 3-52T	Diode BYT52M / Telefu DBYT-52M*
D806	93A 60-106-52T	BYD33G
D807	93A 60-106-52T	BYD33G
D808	93A 60-106-52T	BYD33G
D809	93A3040- 5	FUF5404 by Fargor
D809	93A3040- 6	HER304 Taiwan semi
D810	93A 220- 11	DMV32B SGS damper modual diode
D810	93A 220- 12	FMP-2FUR
! D811	93A 39-52-52T	ZD HZ5C2/HITACHI TAP HZ5C2/HIT
D812	93A 39-52-52T	ZD HZ5C2/HITACHI TAP HZ5C2/HIT
D813	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D814	93A 64- 11-52T	Diode 1N4148
D815	93A 64- 11-52T	Diode 1N4148
D816	93A 64- 11-52T	Diode 1N4148
D817	93A 64- 11-52T	Diode 1N4148
D818	93A 64- 11-52T	Diode 1N4148
D820	93A 60-106-52T	BYD33G

Location	CMC785 / CMC770	Specification
D821	93A 64- 11-52T	Diode 1N4148
D822	93A1100- 3-52T	Diode BYT52M / Telefu DBYT-52M*
D823	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D824	93A1100- 3-52T	Diode BYT52M / Telefu DBYT-52M*
D825	93A1100- 3-52T	Diode BYT52M / Telefu DBYT-52M*
D826	93A 64- 11-52T	Diode 1N4148
D827	93A 60-106-52T	BYD33G
D828	93A 60-21T-52T	FRD 1.5A 500V FR155
D829	93A 60-21T-52T	FRD 1.5A 500V FR155
D830	93A 64- 11-52T	Diode 1N4148
D831	93A3006- 1	S.B.Diode 3A/60V IR/31DQ06
D831	93A3006- 2	SR306 Taiwan semi
D832	93A 60-105-52T	DINS-4060
D833	93A 64- 11-52T	Diode 1N4148
D834	93A 60-106-52T	BYD33G
! D902	93A 50-460- 1	TS4B05G 4A/600V Bridge by TS
D902	93A 50-460- 2	D3SBA60 4A 600V Bridge shinden
D903	93A1100- 3-52T	Diode BYT52M / Telefu DBYT-52M*
D904	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D905	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D906	93A 64- 11-52T	Diode 1N4148
D908	93A 39-138-52T	HZ16-2 15.7-16.5V Hitachi
D909	93A1040- 6-52T	FUF4004 Fargor
D909	93A1040- 7-52T	HER105 Taiwan semi
D910	93A1100- 3-52T	Diode BYT52M / Telefu DBYT-52M*
D911	93A1060- 6T-52T	HER306 Taiwan semi
D911	93A3060- 6	FUF5406 Fargor fast rec. diode
D912	93A3020- 5	F R D 200V/3A FUF5402/FAGOR
D912	93A3020- 7	FR303 Taiwan semi
D913	93A3006- 1	S.B.Diode 3A/60V IR/31DQ06
D913	93A3006- 2	SR306 Taiwan semi
D914	93A 64- 11-52T	Diode 1N4148
D915	93A 39- 52-52T	ZD HZ5C2/HITACHI TAP HZ5C2/HIT
D916	93A 64- 11-52T	Diode 1N4148
D917	93A 64- 11-52T	Diode 1N4148
D920	93A 64- 11-52T	Diode 1N4148
D921	93A 64- 11-52T	Diode 1N4148
F101	84A 7- 40	250VAC 3A S-B 5TT BEL, GMD BUS
F101	84A 33- 11	Fuse clip pitch 6.5MM for 5x20
IC101	56A1125-12	UM68P61A UM CPU for S785 (7GIr)
IC101	56A1125-16	UM68P61A UM CPU for S785A (7GIrA)
IC101	56A1125-17	UM68P61A UM CPU for S785 (7VIr/7VIr+)
IC101	56A1125-18	UM68P61A UM CPU for S785A (7VIrA/7VIrA+)
IC103	56A1133-13	24C08 8P EEPROM MICROCHIP
IC103	56A1133-14	24C08 8P EEPROM BY ATMEL
IC104	56A74LS-86	14 Pin IC 74LS86
IC104	56A74LS-86 - H	14 Pin IC 74LS86 / HITACHI
IC105	56A1139- 4	LXC437P1 (MC141546P) Mototola
IC401	56A-366- 2	28 Pin IC LM1281/NS LM1281/ N.
IC601	56A-533- 1	Vert. out IC TDA8172 TDA8172 SG
IC801	56A-541- 1	TDA9105 42P

Location	CMC785 / CMC770	Specification
IC802	56A-192- 3	8P IC LM358P/TI LM358P/TI
IC802	56A-192- 6	LM358N S.T. DUAL OP AMP 8P
IC803	56A-379- 3	8P IC KA3842B/SAMSUN KA3842B/S
IC803	56A-379- 15	UC3842P 8P
IC901	56A-379- 3	8P IC KA3842B/SAMSUN KA3842B/S
IC901	56A-379- 15	UC3842P 8P
IC902	56A-543- 1	4N35-A 6P Polo coupler
IC903	56A-543- 1	4N35-A 6P Polo coupler
IC904	56A-133- 12	3 Pin 12V Regulator 7812
IC904	56A-133- 12- ST	L7812 12V Regulator SGS-Thomson
J0001	95A 90- 23	Tin Coated
J0002	95A 90- 23	Tin Coated
J0003	95A 90- 23	Tin Coated
J0004	95A 90- 23	Tin Coated
J0005	95A 90- 23	Tin Coated
J0006	95A 90- 23	Tin Coated
J0007	95A 90- 23	Tin Coated
J0008	95A 90- 23	Tin Coated
J0009	95A 90- 23	Tin Coated
J0010	95A 90- 23	Tin Coated
J0011	95A 90- 23	Tin Coated
J0012	95A 90- 23	Tin Coated
J0013	95A 90- 23	Tin Coated (CMC785/770)
J0014	95A 90- 23	Tin Coated (CMC785/770)
J0015	95A 90- 23	Tin Coated
J0016	95A 90- 23	Tin Coated
J0017	95A 90- 23	Tin Coated
J0018	95A 90- 23	Tin Coated
J0019	95A 90- 23	Tin Coated
J0020	71A 55- 19	3.5 X 8.9 X 0.65 YENG TAT E6H
J0021	95A 90- 23	Tin Coated
J0022	95A 90- 23	Tin Coated
J0023	95A 90- 23	Tin Coated
J0024	95A 90- 23	Tin Coated
J0025	95A 90- 23	Tin Coated
J0026	95A 90- 23	Tin Coated
J0027	95A 90- 23	Tin Coated
J0028	95A 90- 23	Tin Coated
J0029	95A 90- 23	Tin Coated
J0030	95A 90- 23	Tin Coated
J0031	95A 90- 23	Tin Coated
J0032	71A 55- 19	3.5 X 8.9 X 0.65 YENG TAT E6H
J0033	95A 90- 23	Tin Coated
J0034	95A 90- 23	Tin Coated
J0035	95A 90- 23	Tin Coated
J0036	95A 90- 23	Tin Coated
J0037	95A 90- 23	Tin Coated
J0038	95A 90- 23	Tin Coated
J0039	95A 90- 23	Tin Coated
J0040	95A 90- 23	Tin Coated
J0041	95A 90- 23	Tin Coated

Location	CMC785 / CMC770	Specification
J0042	95A 90- 23	Tin Coated
J0043	95A 90- 23	Tin Coated
J0044	95A 90- 23	Tin Coated
J0045	95A 90- 23	Tin Coated
J0046	95A 90- 23	Tin Coated
J0047	95A 90- 23	Tin Coated
J0048	95A 90- 23	Tin Coated
J0049	95A 90- 23	Tin Coated
J0050	95A 90- 23	Tin Coated
J0051	95A 90- 23	Tin Coated
J0052	95A 90- 23	Tin Coated
J0053	95A 90- 23	Tin Coated
J0054	95A 90- 23	Tin Coated
J0055	95A 90- 23	Tin Coated
J0056	95A 90- 23	Tin Coated
J0057	95A 90- 23	Tin Coated
J0058	95A 90- 23	Tin Coated
J0060	95A 90- 23	Tin Coated
J0061	95A 90- 23	Tin Coated
J0062	95A 90- 23	Tin Coated
J0063	95A 90- 23	Tin Coated
J0064	95A 90- 23	Tin Coated
J0065	95A 90- 23	Tin Coated
J0066	95A 90- 23	Tin Coated
J0067	95A 90- 23	Tin Coated
J0068	95A 90- 23	Tin Coated
J0069	95A 90- 23	Tin Coated
J0070	95A 90- 23	Tin Coated
J0071	95A 90- 23	Tin Coated
J0072	95A 90- 23	Tin Coated
J0073	95A 90- 23	Tin Coated
J0074	95A 90- 23	Tin Coated
J0075	95A 90- 23	Tin Coated
J0076	95A 90- 23	Tin Coated
J0077	95A 90- 23	Tin Coated
J0078	95A 90- 23	Tin Coated
J0079	95A 90- 23	Tin Coated
J0080	95A 90- 23	Tin Coated
J0081	95A 90- 23	Tin Coated
J0082	95A 90- 23	Tin Coated
J0083	95A 90- 23	Tin Coated
J0084	95A 90- 23	Tin Coated
J0085	95A 90- 23	Tin Coated
J0086	95A 90- 23	Tin Coated
J0087	95A 90- 23	Tin Coated
J0088	95A 90- 23	Tin Coated
J0089	95A 90- 23	Tin Coated
J0090	95A 90- 23	Tin Coated
J0091	95A 90- 23	Tin Coated
J0092	95A 90- 23	Tin Coated
J0093	95A 90- 23	Tin Coated

Location	CMC785 / CMC770	Specification
J0094	95A 90- 23	Tin Coated
J0095	95A 90- 23	Tin Coated
J0096	95A 90- 23	Tin Coated
J0097	95A 90- 23	Tin Coated
J0098	95A 90- 23	Tin Coated
J0099	95A 90- 23	Tin Coated
J0100	95A 90- 23	Tin Coated
J0101	95A 90- 23	Tin Coated
J0102	95A 90- 23	Tin Coated
J0103	95A 90- 23	Tin Coated
J0104	95A 90- 23	Tin Coated
J0105	95A 90- 23	Tin Coated
J0106	95A 90- 23	Tin Coated
J0107	61A 172-220-52T	22 OHM 5% 1/4W
J0108	95A 90- 23	Tin Coated
J0109	95A 90- 23	Tin Coated
J0110	95A 90- 23	Tin Coated
J0111	95A 90- 23	Tin Coated
J0112	95A 90- 23	Tin Coated
J0113	95A 90- 23	Tin Coated
J0114	95A 90- 23	Tin Coated
J0115	95A 90- 23	Tin Coated
J0116	95A 90- 23	Tin Coated
J0117	95A 90- 23	Tin Coated
J0118	95A 90- 23	Tin Coated
J0119	95A 90- 23	Tin Coated
J0120	95A 90- 23	Tin Coated
J0121	95A 90- 23	Tin Coated
J0122	95A 90- 23	Tin Coated
J0123	95A 90- 23	Tin Coated
J0124	95A 90- 23	Tin Coated
J0125	95A 90- 23	Tin Coated
J0126	95A 90- 23	Tin Coated
J0127	95A 90- 23	Tin Coated
J0128	95A 90- 23	Tin Coated
J0129	95A 90- 23	Tin Coated
J0130	95A 90- 23	Tin Coated
J0131	95A 90- 23	Tin Coated
J0132	95A 90- 23	Tin Coated
J0133	95A 90- 23	Tin Coated
J0134	95A 90- 23	Tin Coated
J0135	61A 172-102-52T	1K OHM 5% 1/4W
J0136	95A 90- 23	Tin Coated
J0137	95A 90- 23	Tin Coated
J0138	95A 90- 23	Tin Coated
J0139	95A 90- 23	Tin Coated
J0140	95A 90- 23	Tin Coated
J0141	95A 90- 23	Tin Coated
J0142	95A 90- 23	Tin Coated
J0143	95A 90- 23	Tin Coated
J0144	95A 90- 23	Tin Coated

Location	CMC785 / CMC770	Specification
J0197	95A 90- 23	Tin Coated
J0198	95A 90- 23	Tin Coated
J0199	95A 90- 23	Tin Coated
J0200	95A 90- 23	Tin Coated
L101	73A 53-470-10	Peaking coil 47UH + -10%
L102	73A 53-470-10	Peaking coil 47UH + -10%
L401	750A1697-501	Rotation coil
L401	71A 55 - 9	Bead 3.5*6.0*0.8 Jantex RH 60
L402	71A 55 - 9	Bead 3.5*6.0*0.8 Jantex RH 60
L403	53A- 40- 8	DSS306-55Y5S220M100 Murata
L403	53A- 40- 10	EMI Filter 22PF
L404	53A- 40- 8	DSS306-55Y5S220M100 Murata
L404	53A- 40- 10	EMI Filter 22PF
L405	53A- 40- 8	DSS306-55Y5S220M100 Murata
L405	53A- 40- 10	EMI Filter 22PF
L406	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L801	73A 53-102-10	1 mH Peaking coil
L802	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L803	73A 253-101	Choke coil DR16X18 110UH
L805	73A 147-101	Linear coil DR14X15 4.9UH
L806	73A 147-102	Linear coil DR14X15 3.8UH
L807	73A 253-102	Choke coil DR14X15 4.0MH
L901	73A 174- 10	Line choke ET-23
L902	73A 173- 10	Line choke UU-10.5 1.0MH
L903	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L904	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L905	71A 55 - 9	Bead 3.5*6.0*0.8 Jantex RH 60
L906	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L907	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L908	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L909	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
L910	71A 55- 19	3.5*8.9*0.65 YENG TAT EGH
LED	81A 10- 5	CSL-F500YG2MT by CSC
Q401	57A 420- 1- T	TR.2SA733/NEC T2A7-33**-NE2
Q401	57A 420- SG- T	KSA733GC Samsung
Q401	57A 736- 1- T	KSA916-YTA Samsung
Q404	57A 516- 1- T	TRAN PH2369 Taping PH2369/Phil
Q404	57A 516- 2- T	HPH2369 HI-SINCERITY
Q405	57A 516- 1- T	TRAN PH2369 Taping PH2369/Phil
Q405	57A 516- 2- T	HPH2369 HI-SINCERITY
Q406	57A 516- 1- T	TRAN PH2369 Taping PH2369/Phil
Q406	57A 516- 2- T	HPH2369 HI-SINCERITY
Q801	57A-729- 1	2SC5048
Q802	57A 731- 1- T	2SK941
Q803	57A-477- Y	Transistor 2SC1959 (Y)
Q804	57A-727- 1	2SA200
Q804	57A-727- 2	2SA673C PNP Transistor Hitachi
Q805	57A 419- Q- T	GEN. TR. 2SC945Q/NEC 2SC945Q/N
Q805	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA
Q805	57A 419- Q- T	GEN. TR. 2SC945Q/NEC 2SC945Q/N
Q805	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA

Location	CMC785 / CMC770	Specification
J0145	95A 90- 23	Tin Coated
J0146	95A 90- 23	Tin Coated
J0147	95A 90- 23	Tin Coated
J0148	95A 90- 23	Tin Coated
J0149	95A 90- 23	Tin Coated
J0150	95A 90- 23	Tin Coated
J0151	95A 90- 23	Tin Coated
J0152	95A 90- 23	Tin Coated
J0153	95A 90- 23	Tin Coated
J0154	95A 90- 23	Tin Coated
J0155	95A 90- 23	Tin Coated
J0156	95A 90- 23	Tin Coated
J0157	95A 90- 23	Tin Coated
J0158	95A 90- 23	Tin Coated
J0159	95A 90- 23	Tin Coated
J0160	95A 90- 23	Tin Coated
J0161	95A 90- 23	Tin Coated
J0162	95A 90- 23	Tin Coated
J0163	95A 90- 23	Tin Coated
J0164	95A 90- 23	Tin Coated
J0165	95A 90- 23	Tin Coated
J0166	95A 90- 23	Tin Coated
J0167	95A 90- 23	Tin Coated
J0168	95A 90- 23	Tin Coated
J0169	95A 90- 23	Tin Coated
J0170	95A 90- 23	Tin Coated
J0171	95A 90- 23	Tin Coated
J0172	95A 90- 23	Tin Coated
J0173	95A 90- 23	Tin Coated
J0174	95A 90- 23	Tin Coated
J0175	95A 90- 23	Tin Coated
J0176	95A 90- 23	Tin Coated
J0178	95A 90- 23	Tin Coated
J0179	95A 90- 23	Tin Coated
J0180	95A 90- 23	Tin Coated
J0181	95A 90- 23	Tin Coated
J0182	95A 90- 23	Tin Coated
J0183	95A 90- 23	Tin Coated
J0184	95A 90- 23	Tin Coated
J0185	95A 90- 23	Tin Coated
J0186	95A 90- 23	Tin Coated
J0187	95A 90- 23	Tin Coated
J0188	95A 90- 23	Tin Coated
J0189	95A 90- 23	Tin Coated
J0190	95A 90- 23	Tin Coated
J0191	95A 90- 23	Tin Coated
J0192	95A 90- 23	Tin Coated
J0193	95A 90- 23	Tin Coated
J0194	95A 90- 23	Tin Coated
J0195	95A 90- 23	Tin Coated
J0196	95A 90- 23	Tin Coated

Location	CMC785 / CMC770	Specification
Q910	57A 420- SG- T	KSA733GC Samsung
R101	61A 172-103-52T	10K OHM 5% 1/4W
R102	61A 172-103-52T	10K OHM 5% 1/4W
R103	61A 172-332-52T	3.3K OHM 5% 1/4W
R104	61A 172-472-52T	4.7K OHM 5% 1/4W
R105	61A 172-103-52T	10K OHM 5% 1/4W
R106	61A 172-333-52T	33K OHM 5% 1/4W
R107	61A 172-472-52T	4.7K OHM 5% 1/4W
R109	61A 602-105-52T	1M OHM 5% 1/6W
R110	61A 172-101-52T	100ohm + -5% 1/4W
R120	61A 172-472-52T	4.7K OHM 5% 1/4W
R121	61A 172-472-52T	4.7K OHM 5% 1/4W
R122	61A 172-102-52T	1K OHM 5% 1/4W
R123	61A 172-472-52T	4.7K OHM 5% 1/4W
R124	61A 172-223-52T	22K OHM 5% 1/4W
R125	61A 172-223-52T	22K OHM 5% 1/4W
R126	61A 172-472-52T	4.7K OHM 5% 1/4W
R127	61A 172-472-52T	4.7K OHM 5% 1/4W
R128	61A 172-470-52T	47 OHM 5% 1/4W
R129	61A 172-102-52T	1K OHM 5% 1/4W
R130	61A 172-101-52T	100ohm + -5% 1/4W
R131	61A 172-101-52T	100ohm + -5% 1/4W
R133	61A 172-472-52T	4.7K OHM 5% 1/4W
R134	61A 172-472-52T	4.7K OHM 5% 1/4W
R135	61A 172-472-52T	4.7K OHM 5% 1/4W
R136	61A 172-472-52T	4.7K OHM 5% 1/4W
R137	61A 172-472-52T	4.7K OHM 5% 1/4W
R138	61A 172-472-52T	4.7K OHM 5% 1/4W
R139	61A 172-472-52T	4.7K OHM 5% 1/4W
R140	61A 172-472-52T	4.7K OHM 5% 1/4W
R142	61A 172-472-52T	4.7K OHM 5% 1/4W
R143	61A 172-472-52T	4.7K OHM 5% 1/4W
R144	61A 172-472-52T	4.7K OHM 5% 1/4W
R145	61A 172-472-52T	4.7K OHM 5% 1/4W
R147	61A 172-102-52T	1K OHM 5% 1/4W
R148	61A 172-470-52T	47 OHM 5% 1/4W
R149	61A 172-103-52T	10K OHM 5% 1/4W
R150	61A 172-101-52T	100 OHM + -5% 1/4W
R151	61A152M-479-64	4.7 OHM + - 5% 2W
R152	61A 172-103-52T	10K OHM 5% 1/4W
R153	61A 172-103-52T	10K OHM 5% 1/4W
R154	61A 172-103-52T	10K OHM 5% 1/4W
R155	61A 172-472-52T	4.7K OHM 5% 1/4W
R156	61A 172-472-52T	4.7K OHM 5% 1/4W
R157	61A 172-472-52T	4.7K OHM 5% 1/4W
R158	61A 172-103-52T	10K OHM 5% 1/4W
R159	61A 172-103-52T	10K OHM 5% 1/4W
R160	61A 172-103-52T	10K OHM 5% 1/4W
R161	61A 172-103-52T	10K OHM 5% 1/4W
R162	61A 172-103-52T	10K OHM 5% 1/4W
R163	61A 172-102-52T	1K OHM 5% 1/4W

Location	CMC785 / CMC770	Specification
Q807	57A 419- Q- T	GEN. TR. 2SC945Q/NEC 2SC945Q/N
Q807	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA
Q808	57A 498- 1- T	TRAN BF423 Taping BF423/Philip
Q808	57A 498- 3- T	HBF423 HI-SINCERITY
Q810	57A 420- 1- T	TR.2SA733/NEC T2A7-33**-NE2
Q810	57A 420- SG- T	KSA733GC Samsung
Q810	57A 736- 1- T	KSA916-YTA Samsung
Q811	57A-552- Q	TRAnsistor 2SD882Q
Q811	57A-733- 1	2SC1162C NPN Transistor Hitachi
Q812	57A 728- 1- T	2SB772
Q813	57A 722- 1- T	HTL145
Q814	57A 722- 1- T	HTL145
Q815	57A 419- Q- T	GEN. TR. 2SC945Q/NEC 2SC945Q/N
Q815	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA
Q816	57A-477- Y	Transistor 2SC1959 (Y)
Q817	57A-600- 6	FS10UM Mitsubishi
Q817	57A-600- 8	IRF630 I.R. MOSFET
Q818	57A-600- 8	IRF630 I.R. MOSFET
Q819	57A-727- 1	2SA200
Q819	57A-727- 2	2SA673C PNP Transistor Hitachi
Q820	57A-600- 6	FS10UM Mitsubishi
Q820	57A-723- 1	FS10KM-5 Mitsubishi
Q821	57A-477- Y	Transistor 2SC1959 (Y)
Q822	57A-286- 10	2SD313
Q822	57A-286- 11	2SD2107W-C HITACHI
Q823	57A-723- 1	FS10KM-5 Mitsubishi
Q823	57A-600- 6	FS10UM Mitsubishi
Q824	57A-727- 1	2SA200
Q824	57A-727- 2	2SA673C PNP Transistor Hitachi
Q825	57A 420- 1- T	TR.2SA733/NEC T2A7-33**-NE2
Q825	57A 420- SG- T	KSA733GC Samsung
Q825	57A 736- 1- T	KSA916-YTA Samsung
Q826	57A 417- 1-T	TR-2N3904/Motorola Q2N3-904*-M
Q826	57A 417- 3	TR-MPS3904-Philips MPS3904/PHI
Q827	57A 728- 1	2SB772
Q828	57A 419- Q- T	GEN. TR. 2SC945Q/NEC 2SC945Q/N
Q828	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA
Q829	57A 417- 1-T	TR-2N3904/Motorola Q2N3-904*-M
Q829	57A 417- 3	TR-MPS3904-Philips MPS3904/PHI
Q901	57A 724- 1	FS7KM-12 Mitshbishi
Q902	57A 566- 4	MCR100-6-Motorola
Q903	57A 721- 1- T	DTC114ES by ROHM
Q904	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA
Q905	57A 728- 1- T	2SB772
Q906	57A 419- Q- T	GEN. TR. 2SC945Q/NEC 2SC945Q/N
Q906	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA
Q907	57A 730- 1	TL431
Q908	57A 419- Q- T	GEN. TR. 2SC945Q/NEC 2SC945Q/N
Q908	57A 419- SG- T	TR. KSC945GC Taping KSC945GC/SA
Q909	57A 726- 1	2SC1384R NPN Panasonic
Q910	57A 420- 1- T	TR.2SA733/NEC T2A7-33**-NE2

Location	CMC785 / CMC770	Specification
R164	61A 172-102-52T	1K OHM 5% 1/4W
R165	61A 172-332-52T	3300 OHM 5% 1/4W
R166	61A 172-222-52T	2.2K OHM 5% 1/4W
R167	61A 602-474-52T	470K OHM 5% 1/6W
R168	61A 172-472-52T	4.7K OHM 5% 1/4W
R169	61A 172-101-52T	100ohm + -5% 1/4W
R170	61A 172-101-52T	100ohm + -5% 1/4W
R171	61A 172-103-52T	10K OHM 5% 1/4W
R172	61A 172-103-52T	10K OHM 5% 1/4W
R173	61A 172-103-52T	10K OHM 5% 1/4W
R174	61A 172-103-52T	10K OHM 5% 1/4W
R175	61A 602-103-52T	10K OHM 5% 1/6W
R176	61A 602-472-52T	4.7K OHM 5% 1/6W
R177	61A 602-103-52T	10K OHM 5% 1/6W
R178	61A 602-103-52T	10K OHM 5% 1/6W
R179	61A 172-102-52T	1K OHM 5% 1/4W
R401	61A 172-472-52T	4.7K OHM 5% 1/4W
R402	61A 172-472-52T	4.7K OHM 5% 1/4W
R403	61A 172-472-52T	4.7K OHM 5% 1/4W
R405	61A 172-102-52T	1K OHM 5% 1/4W
R406	61A 172-471-52T	470 OHM 5% 1/4W
R407	61A 172-471-52T	470 OHM 5% 1/4W
R408	61A 172-471-52T	470 OHM 5% 1/4W
R409	61A 172-100-52T	10ohm + -5% 1/4W
R410	61A 172-330-52T	33 OHM + -5% 1/4W
R411	61A 172-330-52T	33 OHM + -5% 1/4W
R412	61A 172-330-52T	33 OHM + -5% 1/4W
R413	61A 172-333-52T	33K OHM 5% 1/4W
R414	61A 172-104-52T	100K OHM + -5% 1/4W
R416	61A 172-222-52T	2.2K OHM 5% 1/4W
R417	61A 602-750-52T	75 OHM 5% 1/6W
R418	61A 602-750-52T	75 OHM 5% 1/6W
R419	61A 602-750-52T	75 OHM 5% 1/6W
R420	61A 172-124-52T	120K OHM 5% 1W
R421	61A 172-102-52T	1K OHM 5% 1/4W
R422	61A 172-100-52T	10ohm + -5% 1/4W
R423	61A 172-102-52T	1K OHM 5% 1/4W
R424	61A 172-100-52T	10ohm + -5% 1/4W
R427	61A 172-102-52T	1K OHM 5% 1/4W
R429	61A 602-391-52T	390 OHM 5% 1/6W
R430	61A 602-220-52T	22 OHM 5% 1/6W
R431	61A 172-750-52T	75 OHM + -5% 1/4W
R432	61A 602-101-52T	100 OHM 5% 1/6W
R433	61A 602-391-52T	390 OHM 5% 1/6W
R434	61A 602-220-52T	22 OHM 5% 1/6W
R435	61A 172-750-52T	75 OHM + -5% 1/4W
R436	61A 602-101-52T	100 OHM 5% 1/6W
R437	61A 602-391-52T	390 OHM 5% 1/6W
R438	61A 602-220-52T	22 OHM 5% 1/6W
R439	61A 172-750-52T	75 OHM + -5% 1/4W
R440	61A 602-101-52T	100 OHM 5% 1/6W

Location	CMC785 / CMC770	Specification
R441	61A 172-563-52T	56K OHM 5% 1/4W
R442	61A 172-682-52T	6.8K OHM 5% 1/4W
R443	61A 172-334-52T	330K OHM 5% 1/4W
R444	61A 172-104-52T	100K OHM + -5% 1/4W
R445	61A 172-154-52T	150K OHM 5% 1/4W
R446	61A 172-124-52T	120K OHM 5% 1W
R447	61A 172-334-52T	330K OHM 5% 1/4W
R448	61A 172-124-52T	120K OHM 5% 1W
R449	61A 172-334-52T	330K OHM 5% 1/4W
R450	61A 172-154-52T	150K OHM 5% 1/4W
R451	61A 172-101-52T	100ohm + -5% 1/4W
R452	61A 172-223-52T	22K OHM 5% 1/4W
R454	61A 172-101-52T	100ohm + -5% 1/4W
R601	61A 172-222-52T	2.2K OHM 5% 1/4W
R602	61A 172-105-52T	1MEG OHM 5% 1/4W
R603	61A152M-479-64	4.7 OHM + - 5% 2W
R604	61A 172-152-52T	1.5K OHM 5% 1/4W
R605	61A 175-109-52T	1 OHM + -5% 1/2W
R606	61A 175-221-52T	220 OHM 5% 1/2W
R607	61A 208-508-64	0.5 OHM 5% 1W
R608	61A152M-479-64	4.7 OHM + - 5% 2W
R609	61A 172-103-52T	10K OHM 5% 1/4W
R610	61A 172-103-52T	10K OHM 5% 1/4W
R611	61A 602-203-52T	20K OHM 5% 1/6W
R612	61A 172-333-52T	33K OHM 5% 1/4W
R613	61A 172-223-52T	22K OHM 5% 1/4W
R614	61A 602-153-52T	15K OHM 5% 1/6W
R615	61A 172-222-52T	2.2K OHM 5% 1/4W
R616	61A 172-222-52T	2.2K OHM 5% 1/4W
R617	61A 172-332-52T	3300 OHM 5% 1/4W
R618	61A 602-393-52T	39K OHM + -5% 1/6W
R619	61A 602-393-52T	39K OHM + -5% 1/6W
R620	61A 172-393-52T	39K OHM 5% 1/4W
R621	61A 172-393-52T	39K OHM 5% 1/4W
R622	61A 172-393-52T	39K OHM 5% 1/4W
R623	61A 172-393-52T	39K OHM 5% 1/4W
R624	61A 172-222-52T	2.2K OHM 5% 1/4W
R625	61A 172-222-52T	2.2K OHM 5% 1/4W
R626	61A 172-222-52T	2.2K OHM 5% 1/4W
R627	61A 172-222-52T	2.2K OHM 5% 1/4W
R628	61A 172-393-52T	39K OHM 5% 1/4W
R8001	61A 172-332-52T	3300 OHM 5% 1/4W
R8002	61A 172-273-52T	27K OHM 5% 1/4W
R8003	61A 602-103-52T	10K OHM 5% 1/6W
R8004	61A 172-222-52T	2.2K OHM 5% 1/4W
R8005	61A 172-222-52T	2.2K OHM 5% 1/4W
R8006	61A 175-224-52T	220K OHM + -5% 1/2W
R8007	61A 172-109-52T	1 OHM + -5% 1/4W
R8008	61A 172-682-52T	6.8K OHM 5% 1/4W
R8009	61A 210-472-52T	4.7K OHM 1% 1/6W
R8010	61A 172-152-52T	1.5K OHM 5% 1/4W

Location	CMC785 / CMC770	Specification
R8011	61A 172-472-52T	4.7K OHM 5% 1/4W
R8012	61A 602-393-52T	39K OHM + -5% 1/6W
R8013	61A 172-472-52T	4.7K OHM 5% 1/4W
R8014	61A 602-102-52T	1K OHM 5% 1/6W
R8015	61A 172-105-52T	1MEG OHM 5% 1/4W
R8016	61A 172-561-52T	560 OHM 5% 1/4W
R8017	61A 172-103-52T	10K OHM 5% 1/4W
R8018	61A 172-333-52T	33K OHM 5% 1/4W
R8019	61A 172-222-52T	2.2K OHM 5% 1/4W
R8020	61A 602-104-52T	100K OHM 5% 1/6W
R8021	61A 602-222-52T	2.2K OHM + -5% 1/6W
R8022	61A 172-561-52T	560 OHM 5% 1/4W
R8024	61A 172-471-52T	470 OHM 5% 1/4W
R8025	61A 172-331-52T	330 OHM 5% 1/4W
R8026	61A 172-472-52T	4.7K OHM 5% 1/4W
R8027	61A 172-334-52T	330K OHM 5% 1/4W
R8028	61A 172-102-52T	1K OHM 5% 1/4W
R8029	61A 172-333-52T	33K OHM 5% 1/4W
R8030	61A152M-220-64	22 OHM 5% 2W
R8031	61A152M-220-64	22 OHM 5% 2W
R8033	61A 172-123-52T	12K OHM 5% 1W
R8034	61A 208-123-64	12K OHM 5% 1W
R8035	61A 172-101-52T	100 OHM 5% 1/4W
R8036	61A 208-228-64	0.22 OHM 5% 1W
R8037	61A 172-102-52T	1K OHM 5% 1/4W
R8038	61A 172-152-52T	1.5K OHM 5% 1/4W
R8039	61A 602-332-52T	3.3K OHM 5% 1/6W
R8040	61A 172-223-52T	22K OHM 5% 1/4W
R8041	61A 172-152-52T	1.5K OHM 5% 1/4W
R8042	61A 172-331-52T	330 OHM 5% 1/4W
R8043	61A 172-222-52T	2.2K OHM 5% 1/4W
R8044	61A 172-393-52T	39K OHM 5% 1/4W
R8045	61A 172-473-52T	47K OHM 5% 1/4W
R8046	61A 602-473-52T	47K OHM 5% 1/6W
R8047	61A 172-473-52T	47K OHM 5% 1/4W
R8048	61A 172-473-52T	47K OHM 5% 1/4W
R8049	61A 172-333-52T	33K OHM 5% 1/4W
R8050	61A 172-221-52T	220 OHM 5% 1/4W
R8051	61A 172-103-52T	10K OHM 5% 1/4W
R8052	61A 602-224-52T	220K OHM 5% 1/6W
R8053	61A 602-221-52T	220 OHM + -5% 1/6W
R8054	61A 172-102-52T	1K OHM 5% 1/4W
R8055	61A 172-150-52T	15 OHM + -5% 1/4W
R8056	61A 172-392-52T	3.9K OHM 5% 1/4W (7Glr/7GlrA only)
R8057	61A 602-102-52T	1K OHM 5% 1/6W
R8058	61A 172-104-52T	100K OHM + -5% 1/4W
R8060	61A 172-224-52T	220K OHM 5% 1/4W
R8061	61A 172-473-52T	47K OHM 5% 1/4W
R8062	61A 172-124-52T	120K OHM 5% 1W
R8063	61A 172-102-52T	1K OHM 5% 1/4W
R8064	61A 172-682-52T	6.8K OHM 5% 1/4W

Location	CMC785 / CMC770	Specification
R8073	61A 172-102-52T	1K OHM 5% 1/4W (7VIr/7VIrA only)
R8065	61A 172-103-52T	10K OHM 5% 1/4W
R8066	61A 175-224-52T	220K OHM + -5% 1/2W
R8067	61A 172-105-52T	1MEG OHM 5% 1/4W
R8068	61A 172-750-52T	75 OHM + -5% 1/4W
R8069	61A 175-472-52T	4.7K OHM 5% 1/2W
R8070	61A 175-472-52T	4.7K OHM 5% 1/2W
R8071	61A 172-102-52T	1K OHM 5% 1/4W
R8072	61A 172-682-52T	6.8K OHM 5% 1W
R8073	61A 172-102-52T	1K OHM 5% 1/4W
R8074	61A 172-100-52T	10ohm + -5% 1/4W
R8075	61A 172-102-52T	1K OHM 5% 1/4W
R8076	61A 172-220-52T	22 OHM 5% 1/4W
R8077	61A 172-102-52T	1K OHM 5% 1/4W
R8078	61A 172-682-52T	6.8K OHM 5% 1/4W
R8079	61A 172-104-52T	100K OHM + -5% 1/4W
R8080	61A 172-102-52T	1K OHM 5% 1/4W
R8081	61A 172-104-52T	100K OHM + -5% 1/4W
R8082	61A 172-682-52T	6.8K OHM 5% 1/4W
R8083	61A 172-220-52T	22 OHM 5% 1/4W
R8084	61A 175-471-52T	470 OHM + -5% 1/2W
R8085	61A152M-183-64	18KOHM + - 5% 2W
R8086	61A 175-221-52T	220 OHM 5% 1/2W
R8087	61A 175-221-52T	220 OHM 5% 1/2W
R8088	61A152M-220-64	22 OHM 5% 2W
R8089	61A 172-103-52T	10K OHM 5% 1/4W
R8090	61A152M-220-64	22 OHM 5% 2W
R8091	61A 175-339-52T	3.3 OHM 5% 1/2W
R8092	61A152M-154-64	150K OHM 2W 5% MOF
R8093	61A 172-330-52T	33 OHM + -5% 1/4W
R8094	61A 602-154-52T	150K OHM 5% 1/6W
R8095	61A 172-123-52T	12K OHM 5% 1W
R8096	61A 172-152-52T	1.5K OHM 5% 1/4W
R8097	61A 172-333-52T	33K OHM 5% 1/4W
R8098	61A 172-102-52T	1K OHM 5% 1/4W
R8099	61A 172-682-52T	6.8K OHM 5% 1/4W
R8100	61A 172-154-52T	150K OHM 5% 1/4W
R8101	61A 172-154-52T	150K OHM 5% 1/4W
R8102	61A 172-104-52T	100K OHM + -5% 1/4W
R8103	61A 602-332-52T	3.3K OHM 5% 1/6W
R8104	61A 172-102-52T	1K OHM 5% 1/4W
R8104	61A 172-331-52T	330 OHM 5% 1/4W (for Philips CRT only)
R8105	61A 172-472-52T	4.7K OHM 5% 1/4W
R8106	61A 172-474-52T	470K OHM 5% 1/4W
R8107	61A 172-105-52T	1MEG OHM 5% 1/4W
R8108	61A 172-102-52T	1K OHM 5% 1/4W
R8109	61A 172-100-52T	10ohm + -5% 1/4W
R811	61A152M-479-64	4.7 OHM + - 5% 2W
R8110	61A 172-153-52T	15K OHM 5% 1/4W
R8112	61A 208-228-64	0.22 OHM 5% 1W
R8113	61A 172-220-52T	22 OHM 5% 1/4W

Location	CMC785 / CMC770	Specification
R8114	61A152M-100-64	10 OHM 5% 2W
R8115	61A152M-100-64	10 OHM 5% 2W
R8116	61A 172-331-52T	330 OHM 5% 1/4W
R8117	61A 172-103-52T	10K OHM 5% 1/4W
R8118	61A 172-221-52T	220 OHM 5% 1/4W
R8119	61A 172-101-52T	100ohm + -5% 1/4W
R8120	61A 172-222-52T	2.2K OHM 5% 1/4W
R8121	61A 172-103-52T	10K OHM 5% 1/4W
R8122	61A 172-222-52T	2.2K OHM 5% 1/4W
R8123	61A 172-103-52T	10K OHM 5% 1/4W
R8124	61A 172-222-52T	2.2K OHM 5% 1/4W
R8125	61A 172-103-52T	10K OHM 5% 1/4W
R8126	61A 172-683-52T	68K OHM 5% 1/4W
R8127	61A 172-102-52T	1K OHM 5% 1/4W
R8128	61A 172-333-52T	33K OHM 5% 1/4W
R8129	61A 172-473-52T	47K OHM 5% 1/4W
R8130	61A152M-339-64	3.3 OHM 5% 2W MOF
R903	61A- 52- 26-5	PC213S5140M220 14 OHM 2 Pin
R904	65A305M-102- 2E	1000PF + - 20% 400V
R905	61A- 58- 6	NTC 5 OHM 20% NP-19 Uppermost
R906	61A 175-105-52T	1M OHM + -5% 1/2W
R908	61A152M-823-64	82K OHM 2W 5% Mini type MOF
R909	61A152M-223-59	22K OHM 5% 3W
R910	61A 172-109-52T	1 OHM + -5% 1/4W
R911	61A 172-222-52T	2.2K OHM 5% 1/4W
R912	61A 172-103-52T	10K OHM 5% 1/4W
R913	61A 172-472-52T	4.7K OHM 5% 1/4W
R914	61A 172-470-52T	47 OHM + -5% 1/4W
R915	61A 172-102-52T	1K OHM 5% 1/4W
R916	61A152M-188-64	0.18 OHM 2W 5% MOF
R918	61A 602-103-52T	10K OHM 5% 1/6W
R919	61A 172-273-52T	27K OHM 5% 1/4W
R920	61A 172-153-52T	15K OHM 5% 1/4W
R921	61A 172-471-52T	470 OHM 5% 1/4W
R922	61A 172-223-52T	22K OHM 5% 1/4W
R923	61A152M-510-64	51 OHM 2W 5% MOF
R924	61A152M-510-64	51 OHM 2W 5% MOF
R925	61A 172-683-52T	68K OHM + -5% 1/4W
R926	61A 172-682-52T	6.8K OHM 5% 1/4W
R927	61A 172-103-52T	10K OHM 5% 1/4W
R928	61A 175-102-52T	1K OHM + -5% 1/2W
R929	61A 172-473-52T	47K OHM 5% 1/4W
R930	61A 172-103-52T	10K OHM 5% 1/4W
R931	61A 602-152-52T	1.5K OHM + -5% 1/6W
R932	61A 602-103-52T	10K OHM 5% 1/6W
R933	61A 602-102-52T	1K OHM 5% 1/6W
R934	61A 172-823-52T	82K OHM 5% 1/4W
R935	61A 172-102-52T	1K OHM 5% 1/4W
R936	61A 172-331-52T	330 OHM 5% 1/4W
R937	61A 172-104-52T	100K OHM + -5% 1/4W
R938	61A 172-102-52T	1K OHM 5% 1/4W

	Location	CMC785 / CMC770	Specification
!	R939	61A 175-474-52T	470K OHM 5% 1/2W
	R940	61A 172-102-52T	1K OHM 5% 1/4W
	R941	61A 172-109-52T	1 OHM + -5% 1/4W
	R942	61A 172-102-52T	1K OHM 5% 1/4W
	R943	61A 172-331-52T	330 OHM 5% 1/4W
!	R944	61A 172-102-52T	1K OHM 5% 1/4W
	R945	61A 172-102-52T	1K OHM 5% 1/4W
	R946	61A 172-154-52T	150K OHM 5% 1/4W
	R947	61A 172-472-52T	4.7K OHM 5% 1/4W
	RL801	77A 260- 4 -4	12TBU-5 Takamisawa relay
	RL802	77A 260- 4 -4	12TBU-5 Takamisawa relay
!	RL901	77A 260- 4- 3	VB 12MBU-5 Relay Takamisawa
	SP701	62A 10- 5	SPARK GAP 200V 20% GD412-200V
	SP702	62A 10- 5	SPARK GAP 200V 20% GD412-200V
	SP703	62A 10- 5	SPARK GAP 200V 20% GD412-200V
	SP704	62A 10- 15	SG5-152FPCB 1500V + -500V SGAP
	SP705	62A 10- 15	SG5-152FPCB 1500V + -500V SGAP
	SW	77A 700- 2	EC11B520244 Encoder ALPS
!	SW901	77A 306- 12	BR-12C-11P6 SPST 10A/125V PRON
	T801	79A 785- 1	H.O.T. for S785
	T801	79A 770- 1	H.O.T. for S770
	T802	79A 167-101	X' FMR EE-19 2.0MH
	T803	79A 167-102	X' FMR EL- 22 900UH
	T804	79A 167-103	X' FMR EE-25
!	T901	80A 785- 2	Power X' FMR EE-42/15
	TP2	9A- 203- 8	Brass
	TP3	9A- 203- 8	Brass
	VR401	75A 335-503	50K OHM Semi-VR
!	VR801	75A 335-503	50K OHM Semi-VR
	VR802	75A 335-102	1K OHM + -30% RH0615C13J ALPS
	VR803	75A 335-502	5K OHM Semi-VR
	VR901	75A 335-102	1K OHM + -30% RH0615C13J ALPS
	W101	33A3278- 7	7P Plug B7B-XHA/JST B7B-XHA/JS
	W401	33A3278-11	11P Plug B11B-XHA/JS B11B-XHA/
	W401	71A 100- 2	Ferrite K70 T 16x8x12 King Cord
	W402	33A3278- 6	6P Plug B6B-XHA B6B-XHA/JST
	W402	71A 100- 5	Ferrite Core
	W403	33A3278- 5	5 Pin
	W403	71A 100- 2	Ferrite K70 T 16x8x12 King Cord
	W404	33A3192- 4	4 Pin plug
	W801	33A3278- 2	2P plug B2B-XHA/JST B2B-XHA/JS
	W901	33A3357- 3	2P Plug S785 W901

PARTS LIST OF CRT BOARD

Location	CRPC785 / CRPC770	Specification
	85A 530- 2	Shield
	85A 531- 1	CRT PCB Shield
	87A3504- 2	17" D.F. CRT Socket 033 0 7700
	715A 607- 1	S785 CRT Board
C701	65A 450-104- 4	0.1UF +80-20% Z5V50V
C702	67A 305-100-10T	10UF + -20% 160V 105 C
C703	65A517K-103- 1A	10000PF Z5F 500V
C704	67A 70-229- 9	2.2UF 100V Non-P EC 105 C
C705	65A517K102- 3T	1000PF 10% Z5U 500V
C706	65A 450-104- 4	0.1UF +80-20% Z5V50V
C707	67A 305-100-10T	10UF + -20% 160V 105 C
C708	65A517K-103- 1A	10000PF Z5F 500V
C709	67A 70-229- 9	2.2UF 100V Non-P EC 105 C
C710	65A517K102- 3T	1000PF 10% Z5U 500V
C711	65A 450-104- 4	0.1UF +80-20% Z5V50V
C712	67A 305-100-10T	10UF + -20% 160V 105 C
C713	65A517K-103- 1A	10000PF Z5F 500V
C714	67A 70-229- 9	2.2UF 100V Non-P EC 105 C
C715	65A517K102- 3T	1000PF 10% Z5U 500V
C716	67A 305-101- 4T	100UF + -20% 25V 105 C
C717	65A 450-104- 7	.1UF 50V +80-20% Y5V Ceramic
C718	65A 450-104- 7	.1UF 50V +80-20% Y5V Ceramic
C719	65A 450-104- 7	.1UF 50V +80-20% Y5V Ceramic
C720	67A 305-100- 10T	10UF + -20% 160V 105 C
C721	65A517K-103- 1A	10000PF Z5F 500V
C722	65A517K-103- 1A	10000PF Z5F 500V
C723	65A 444-103- 5	0.01UF 10% 50V Y5P
C725	65A517K-471- 1A	470PF K Z5F 500V
C726	65A 1Z-103- 3B	0.01UF 1KV
D701	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D702	93A 64- 11-52T	Diode 1N4148
D703	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D704	93A 64- 11-52T	Diode 1N4148
D705	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D706	93A 64- 11-52T	Diode 1N4148
L701	79A 167- 104	X' FMR K155
L702	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L704	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L705	79A 167- 104	X' FMR K155
L706	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L707	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L709	79A 167- 104	X' FMR K155
L710	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L712	71A 55- 19	3.5 x 8.9 x 0.65 Jeng TAT E6H
L713	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
Q701	57A 509- 1	2SC3953DE
Q701	57A 509- 8	KCS3953D
Q702	57A 498- 1- T	TRAN BF423 Taping BF423/Philip
Q702	57A 498- 3- T	HBF423 HI-SINCERITY

Location	CRPC785 / CRPC770	Specification
Q703	57A 509- 1	2SC3953DE
Q703	57A 509- 8	KCS3953D
Q704	57A 498- 1- T	TRAN BF423 Taping BF423/Philip
Q704	57A 498- 3- T	HBF423 HI-SINCERITY
Q706	57A 509- 1	2SC3953DE
Q706	57A 509- 8	KCS3953D
Q707	57A 498- 1- T	TRAN BF423 Taping BF423/Philip
Q707	57A 498- 3- T	HBF423 HI-SINCERITY
Q708	57A 725- 1	2SC2705
Q709	57A 725- 1	2SC2705
Q710	57A 725- 1	2SC2705
R701	61A 172-101-52T	100 OHM 5% 1/4W
R702	61A 172-470-52T	47 OHM 5% 1/4W
R703	61A 172-222-52T	2.2K OHM 5% 1/4W
R704	61A153M-222-59	2.2K OHM 5% 3W
R705	61A153M-222-59	2.2K OHM 5% 3W
R706	61A153M-222-59	2.2K OHM 5% 3W
R707	61A 172-102-52T	1K OHM 5% 1/4W
R708	61A 172-472-52T	4.7K OHM 5% 1/4W
R709	61A 172-105-52T	1MEG OHM 5% 1/4W
R710	61A 172-223-52T	22K OHM 5% 1/4W
R711	61A 172-472-52T	4.7K OHM 5% 1/4W
R712	95A 90- 23	Tin Coated
R713	61A 175-330-52T	33 OHM + -5% 1/2W
R714	61A 172-101-52T	100 OHM 5% 1/4W
R715	61A 172-470-52T	47 OHM 5% 1/4W
R716	61A 172-222-52T	2.2K OHM 5% 1/4W
R717	61A153M-222-59	2.2K OHM 5% 3W
R718	61A153M-222-59	2.2K OHM 5% 3W
R719	61A153M-222-59	2.2K OHM 5% 3W
R720	61A 172-102-52T	1K OHM 5% 1/4W
R721	61A 172-472-52T	4.7K OHM 5% 1/4W
R722	61A 172-105-52T	1MEG OHM 5% 1/4W
R723	61A 172-223-52T	22K OHM 5% 1/4W
R724	61A 172-472-52T	4.7K OHM 5% 1/4W
R725	95A 90- 23	Tin Coated
R726	61A 175-330-52T	33 OHM + -5% 1/2W
R727	61A 172-101-52T	100 OHM 5% 1/4W
R728	61A 172-470-52T	47 OHM 5% 1/4W
R729	61A 172-222-52T	2.2K OHM 5% 1/4W
R730	61A153M-222-59	2.2K OHM 5% 3W
R731	61A153M-222-59	2.2K OHM 5% 3W
R732	61A153M-222-59	2.2K OHM 5% 3W
R733	61A 172-102-52T	1K OHM 5% 1/4W
R734	61A 172-472-52T	4.7K OHM 5% 1/4W
R735	61A 172-105-52T	1MEG OHM 5% 1/4W
R736	61A 172-223-52T	22K OHM 5% 1/4W
R737	61A 172-472-52T	4.7K OHM 5% 1/4W
R738	95A 90- 23	Tin Coated
R739	61A 175-330-52T	33 OHM + -5% 1/2W
R740	61A 172-103-52T	10K OHM 5% 1/4W

PARTS LIST OF CRT BOARD

Location	CRPC785 / CRPC770	Specification
	85A 530- 2	Shield
	85A 531- 1	CRT PCB Shield
	87A3504- 2	17" D.F. CRT Socket 033 0 7700
	715A 607- 1	S785 CRT Board
C701	65A 450-104- 4	0.1UF +80-20% Z5V50V
C702	67A 305-100-10T	10UF + -20% 160V 105 C
C703	65A517K-103- 1A	10000PF Z5F 500V
C704	67A 70-229- 9	2.2UF 100V Non-P EC 105 C
C705	65A517K102- 3T	1000PF 10% Z5U 500V
C706	65A 450-104- 4	0.1UF +80-20% Z5V50V
C707	67A 305-100-10T	10UF + -20% 160V 105 C
C708	65A517K-103- 1A	10000PF Z5F 500V
C709	67A 70-229- 9	2.2UF 100V Non-P EC 105 C
C710	65A517K102- 3T	1000PF 10% Z5U 500V
C711	65A 450-104- 4	0.1UF +80-20% Z5V50V
C712	67A 305-100-10T	10UF + -20% 160V 105 C
C713	65A517K-103- 1A	10000PF Z5F 500V
C714	67A 70-229- 9	2.2UF 100V Non-P EC 105 C
C715	65A517K102- 3T	1000PF 10% Z5U 500V
C716	67A 305-101- 4T	100UF + -20% 25V 105 C
C717	65A 450-104- 7	.1UF 50V +80-20% Y5V Ceramic
C718	65A 450-104- 7	.1UF 50V +80-20% Y5V Ceramic
C719	65A 450-104- 7	.1UF 50V +80-20% Y5V Ceramic
C720	67A 305-100- 10T	10UF + -20% 160V 105 C
C721	65A517K-103- 1A	10000PF Z5F 500V
C722	65A517K-103- 1A	10000PF Z5F 500V
C723	65A 444-103- 5	0.01UF 10% 50V Y5P
C725	65A517K-471- 1A	470PF K Z5F 500V
C726	65A 1Z-103- 3B	0.01UF 1KV
D701	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D702	93A 64- 11-52T	Diode 1N4148
D703	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D704	93A 64- 11-52T	Diode 1N4148
D705	93A 64- 19-52T	Diode 1SS83 1SS83/Hitachi
D706	93A 64- 11-52T	Diode 1N4148
L701	79A 167- 104	X' FMR K155
L702	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L704	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L705	79A 167- 104	X' FMR K155
L706	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L707	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L709	79A 167- 104	X' FMR K155
L710	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
L712	71A 55- 19	3.5 x 8.9 x 0.65 Jeng TAT E6H
L713	71A 55- 9	Bead 3.5x6.0x0.8 Jantex RH 60
Q701	57A 509- 1	2SC3953DE
Q701	57A 509- 8	KCS3953D
Q702	57A 498- 1- T	TRAN BF423 Taping BF423/Philip
Q702	57A 498- 3- T	HBF423 HI-SINCERITY

Location	CRPC785 / CRPC770	Specification
Q703	57A 509- 1	2SC3953DE
Q703	57A 509- 8	KCS3953D
Q704	57A 498- 1- T	TRAN BF423 Taping BF423/Philip
Q704	57A 498- 3- T	HBF423 HI-SINCERITY
Q706	57A 509- 1	2SC3953DE
Q706	57A 509- 8	KCS3953D
Q707	57A 498- 1- T	TRAN BF423 Taping BF423/Philip
Q707	57A 498- 3- T	HBF423 HI-SINCERITY
Q708	57A 725- 1	2SC2705
Q709	57A 725- 1	2SC2705
Q710	57A 725- 1	2SC2705
R701	61A 172-101-52T	100 OHM 5% 1/4W
R702	61A 172-470-52T	47 OHM 5% 1/4W
R703	61A 172-222-52T	2.2K OHM 5% 1/4W
R704	61A153M-222-59	2.2K OHM 5% 3W
R705	61A153M-222-59	2.2K OHM 5% 3W
R706	61A153M-222-59	2.2K OHM 5% 3W
R707	61A 172-102-52T	1K OHM 5% 1/4W
R708	61A 172-472-52T	4.7K OHM 5% 1/4W
R709	61A 172-105-52T	1MEG OHM 5% 1/4W
R710	61A 172-223-52T	22K OHM 5% 1/4W
R711	61A 172-472-52T	4.7K OHM 5% 1/4W
R712	95A 90- 23	Tin Coated
R713	61A 175-330-52T	33 OHM + -5% 1/2W
R714	61A 172-101-52T	100 OHM 5% 1/4W
R715	61A 172-470-52T	47 OHM 5% 1/4W
R716	61A 172-222-52T	2.2K OHM 5% 1/4W
R717	61A153M-222-59	2.2K OHM 5% 3W
R718	61A153M-222-59	2.2K OHM 5% 3W
R719	61A153M-222-59	2.2K OHM 5% 3W
R720	61A 172-102-52T	1K OHM 5% 1/4W
R721	61A 172-472-52T	4.7K OHM 5% 1/4W
R722	61A 172-105-52T	1MEG OHM 5% 1/4W
R723	61A 172-223-52T	22K OHM 5% 1/4W
R724	61A 172-472-52T	4.7K OHM 5% 1/4W
R725	95A 90- 23	Tin Coated
R726	61A 175-330-52T	33 OHM + -5% 1/2W
R727	61A 172-101-52T	100 OHM 5% 1/4W
R728	61A 172-470-52T	47 OHM 5% 1/4W
R729	61A 172-222-52T	2.2K OHM 5% 1/4W
R730	61A153M-222-59	2.2K OHM 5% 3W
R731	61A153M-222-59	2.2K OHM 5% 3W
R732	61A153M-222-59	2.2K OHM 5% 3W
R733	61A 172-102-52T	1K OHM 5% 1/4W
R734	61A 172-472-52T	4.7K OHM 5% 1/4W
R735	61A 172-105-52T	1MEG OHM 5% 1/4W
R736	61A 172-223-52T	22K OHM 5% 1/4W
R737	61A 172-472-52T	4.7K OHM 5% 1/4W
R738	95A 90- 23	Tin Coated
R739	61A 175-330-52T	33 OHM + -5% 1/2W
R740	61A 172-103-52T	10K OHM 5% 1/4W

Location	CRPC785 / CRPC770	Specification
R741	61A 172-821-52T	820 OHM 5% 1/4W
R742	61A 172-103-52T	10K OHM 5% 1/4W
R743	61A 172-821-52T	820 OHM 5% 1/4W
R744	61A 172-103-52T	10K OHM 5% 1/4W
R745	61A 172-821-52T	820 OHM 5% 1/4W
R746	61A152M-109-64	1.0 OHM 2W 5% MOF (For 7VIr series)
R746	61A152M-229-64	2.2 OHM 2W 5% MOF (For 7GIr series)
R747	61A 175-470-52T	47 OHM 5% 1/2W
R748	61A 175-224-52T	220K OHM + -5% 1/2W

PARTS LIST OF KEY BOARD

	Location	KEPC785S / KEPC785A	Specification
		90A 355- 1	Heat Sink
		M1A 330- 10- 128	Screw (MTG IC301 = 2P)
		715A 608- 1	S785 Control Board (7GIr/7VIr/7VIr+)
*		715A 609- 1	S785 Control Board (7GIrA/7VIrA/7VIrA+)
*		715A 610- 1	S785 Micro Broad (7GIrA/7VIrA/7VIrA+)
*	MIC	64A 10- 1	Condenser Micphone
	C301	65A 450-104- 3	0.1UF +80-20% Z5U 50V
*	C302	64A 177- 25 - 57	0.1UF J 50V
*	C303	65A 450-104- 3	0.1UF +80-20% Z5U 50V
*	C304	67A 301-101- 4	100UF +- 20% 25V
*	C305	64A 177- 25 - 57	0.1UF J 50V
*	C306	67A 301-101- 4	100UF +- 20% 25V
*	C307	65A 450-470- 4	47PF Z 50V Z5V CC CAP.
*	IC301	56A 535- 1	TDA7057AQ Phlips Audio Amp. (for 7GIrA/7VIrA/7VIrA+)
*	P301	88A 302- 4J	3.5MM P Jack 5 Pin By JYE TAI
*	P302	88A 302- 6J	3.5MM 3 Pin Earphone Jack
*	P303	88A 302- 6J	3.5MM 3 Pin Earphone Jack
*	R301	61A 172-103- 52T	10K OHM 5% 1/4W
*	R302	61A 208-109- 64	1 OHM +- 5% 1W (for 7GIrA/7VIrA/7VIrA+)
	R302	61A 172-471- 52T	470 OHM 5% 1/4W (for 7GIr/7VIr/7VIr+)
	R303	61A 172-471- 52T	470 OHM 5% 1/4W
	R304	61A 172-223- 52T	22K OHM 5% 1/4W
	R305	61A 172-303- 52T	30K OHM 5% 1/4W
*	R306	61A 172-471- 52T	470 OHM 5% 1/4W
	R307	61A 172-473- 52T	47K OHM 5% 1/4W
*	R308	61A 172-331- 52T	330 OHM 5% 1/4W
*	R310	61A 172-333- 52T	33K OHM 5% 1/4W
*	R311	61A 172-153- 52T	15K OHM 5% 1/4W
*	R312	61A 172-333- 52T	33K OHM 5% 1/4W
*	R313	61A 172-153- 52T	15K OHM 5% 1/4W
*	SP-L	33A3278- 2- H	2P Plug B2B-XHA/JST
*	SP-R	33A3278- 2- H	2P Plug B2B-XHA/JST
*	W304	33A3278- 3	3P Plug B3B-XHA/JST
*	W305	33A3278- 3	3P Plug B3B-XHA/JST

" * " mark for with speaker model only

11. CRT RELATION ASSEMBLY PARTS

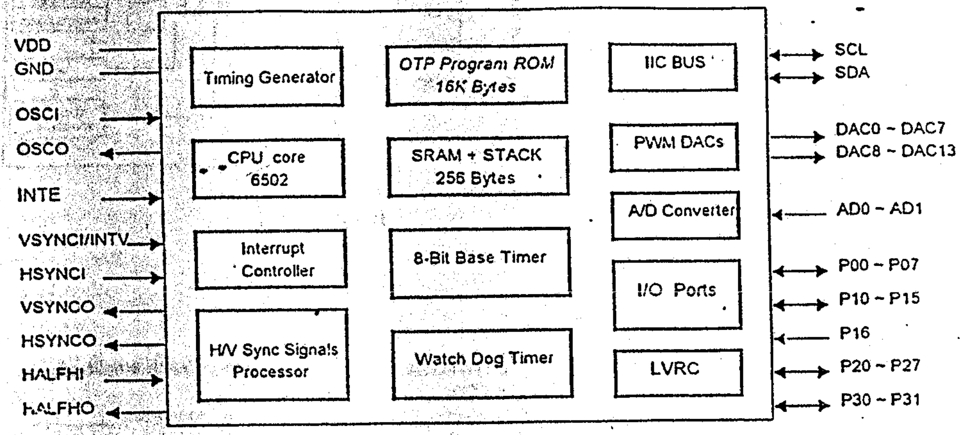
7GIr / 7GIrA

CRT	750A5826-3AV	M41KSX683X74 (T) Hitachi
	750A5865-2AV	M41QAY813X05 (LA) L/G
R8066	61A-175-224- 52T	220 K OHM , 1/2 W. For Hitachi CRT
	61A-175-274- 52T	270 K OHM , 1/2 W. For L/G CRT

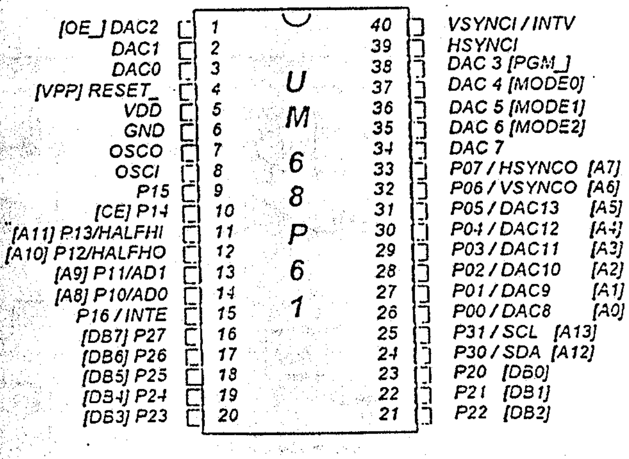
7VIr / 7VIrA / 7VIr+ / 7VIrA+

CRT	750A5861-1AV	M41LFQ803X05 DP 0.28 L/G fir 7VIr/7VIrA
CRT	750A5866-1AV	M41LFQ803X05 (LA) DP 0.28 L/G fir 7VIr/7VIrA/7VIr+/7VIrA+
CRT	750A5840-2AV	M41EHN323X140/2F07E Philips DP 0.27 for 7VIr/7VIrA
CRT	750A5845-3AV	M41EHN325X140/2F07E Philips DP 0.27 for 7VIr+/7VIrA+
R746	61A152M-109-64	1.0 OHM , 2W. For 750A5861-1AV
	61A152M-229-64	2.2 OHM , 2W. For 750A5866-1AV
C824	63A210J-622- 7MM	0.0062 uF, 1600V. For 750A5840-2AV & 750A5845-3AV
C826	64A 140-113- 64	0.0062 uF, 800V. For 750A5840-2AV & 750A5845-3AV
R8056	61A-172-332- 52T	3300 OHM, 1/4 W. For 750A5840-2AV & 750A5845-3AV
R8104	61A-172-331- 52T	330 OHM, 1/4 W. For 750A5840-2AV & 750A5845-3AV

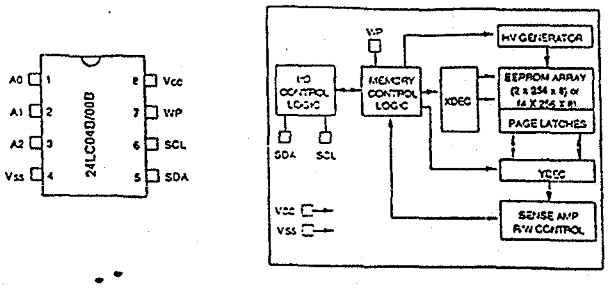
Block diagram


VDD
GND
OSCI
OSCO
INTE
VSYNCI/INTV
HSYNCI
VSYNCO
HSYNCO
HALFHI
HALFHO
Timing Generator
CPU core
6502
Interrupt
Controller
H/V Sync Signals
Processor
OTP Program ROM
16K Bytes
SRAM + STACK
256 Bytes
8-Bit Base Timer
Watch Dog Timer
IIC BUS
PWM DACs
A/D Converter
I/O Ports
LVRC
SCL
SDA
DAC0 ~ DAC7
DAC8 ~ DAC13
AD0 ~ AD1
P00 ~ P07
P10 ~ P15
P16
P20 ~ P27
P30 ~ P31

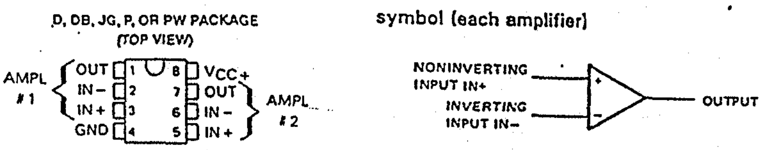
Pin Assignment


[OE_] DAC2 1
DAC1 2
DAC0 3
[VPP] RESET_ 4
VDD 5
GND 6
OSCO 7
OSCI 8
P15 9
[CE] P14 10
[A11] P13/HALFHI 11
[A10] P12/HALFHO 12
[A9] P11/AD1 13
[A8] P10/AD0 14
P16 / INTE 15
[DB7] P27 16
[DB6] P26 17
[DB5] P25 18
[DB4] P24 19
[DB3] P23 20
U
M
6
8
P
6
1
40 VSYNCI / INTV
39 HSYNCI
38 DAC 3 [PGM_]
37 DAC 4 [MODE0]
36 DAC 5 [MODE1]
35 DAC 6 [MODE2]
34 DAC 7
33 P07 / HSYNCO [A7]
32 P06 / VSYNCO [A6]
31 P05 / DAC13 [A5]
30 P04 / DAC12 [A4]
29 P03 / DAC11 [A3]
28 P02 / DAC10 [A2]
27 P01 / DAC9 [A1]
26 P00 / DAC8 [A0]
25 P31 / SCL [A13]
24 P30 / SDA [A12]
23 P20 [DB0]
22 P21 [DB1]
21 P22 [DB2]

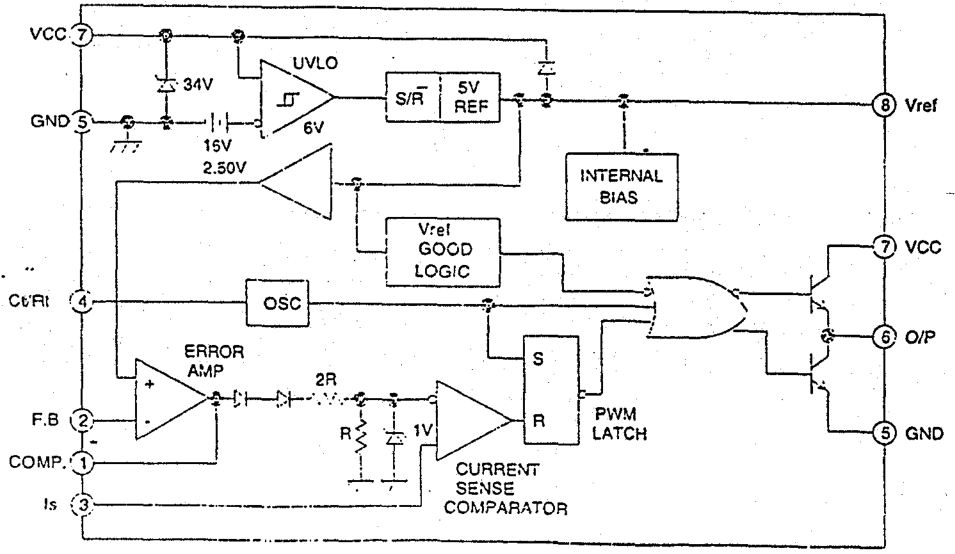
IC101 UM68P61A


A0
A1
A2
Vss
Vcc
WP
SCL
SDA
24LC04B/08B
WP
HV GENERATOR
I/O CONTROL LOGIC
MEMORY CONTROL LOGIC
XDEC
EEPROM ARRAY (2 x 256 x 8) or (4 X 256 X 8)
PAGE LATCHES
SDA
SCL
YDEC
SENSE AMP R/W CONTROL
Vcc
Vss

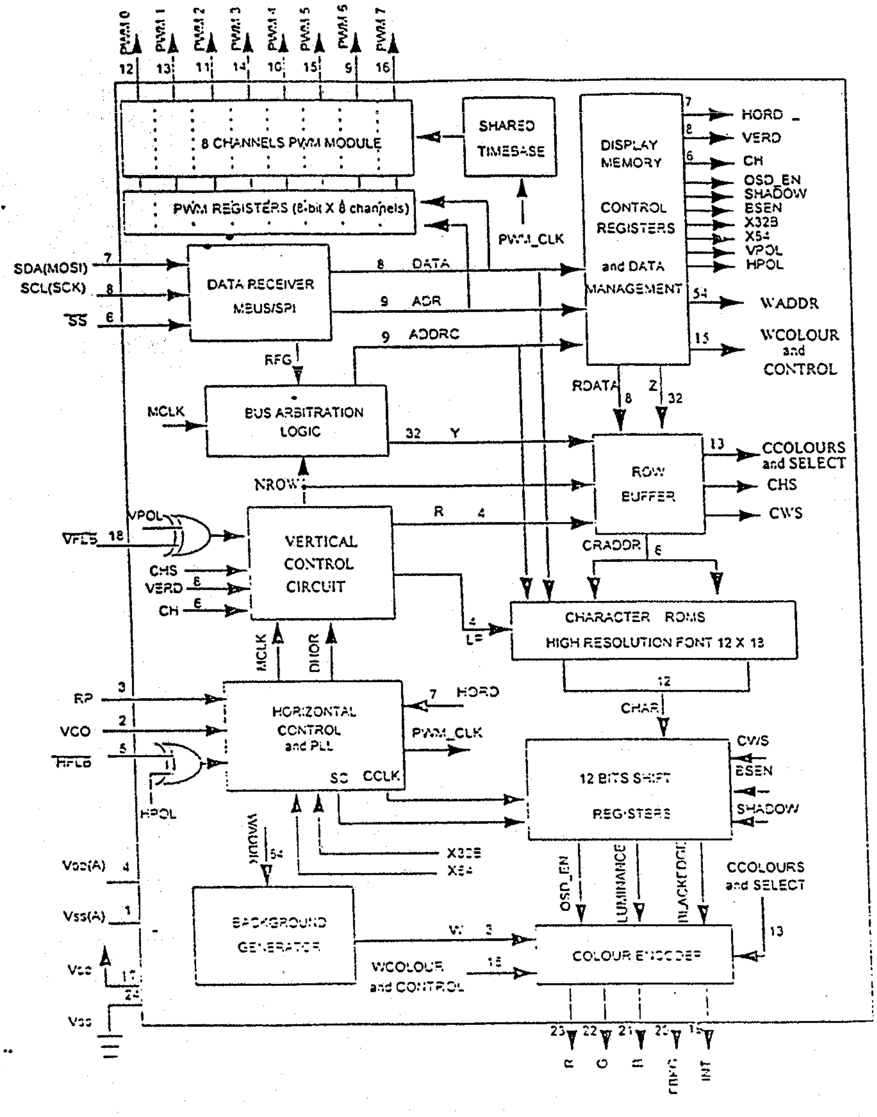
IC103 24C08


D, DB, JG, P, OR PW PACKAGE
(TOP VIEW)
AMPL #1
OUT
IN−
IN+
GND
VCC+
OUT
IN−
IN+
AMPL #2
symbol (each amplifier)
NONINVERTING INPUT IN+
INVERTING INPUT IN−
OUTPUT

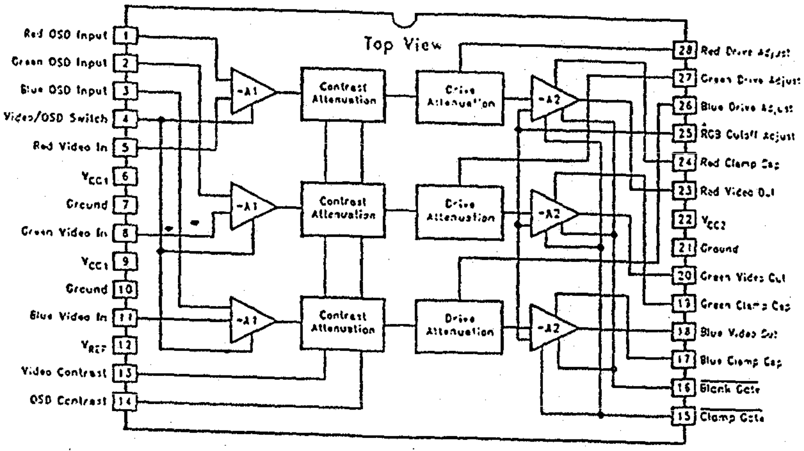
IC802 LM358


VCC 7
GND 5
34V
16V
UVLO
6V
S/R
5V REF
8 Vref
2.50V
INTERNAL BIAS
Vref GOOD LOGIC
7 VCC
Ct/Rt 4
OSC
6 O/P
ERROR AMP
2R
S
R
PWM LATCH
F.B 2
R
1V
COMP. 1
Is 3
CURRENT SENSE COMPARATOR
5 GND

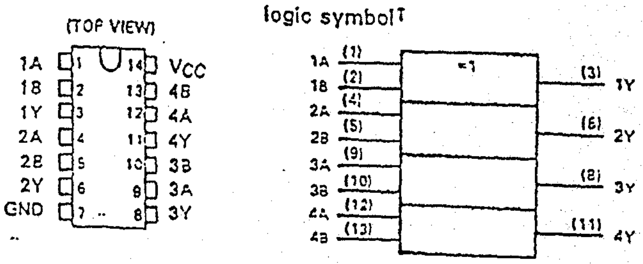
IC901 UC3842


PWM 0
PWM 1
PWM 2
PWM 3
PWM 4
PWM 5
PWM 6
PWM 7
8 CHANNELS PWM MODULE
SHARED TIMEBASE
PWM REGISTERS (8-bit X 8 channels)
PWM_CLK
DISPLAY MEMORY
CONTROL REGISTERS
and DATA MANAGEMENT
HORD
VERD
CH
OSD_EN
SHADOW
ESEN
X32B
X54
VPOL
HPOL
WADDR
WCOLOUR and CONTROL
SDA(MOSI)
SCL(SCK)
SS
DATA RECEIVER MBUS/SPI
DATA
ADR
ADDRC
RFG
MCLK
BUS ARBITRATION LOGIC
Y
RDATA
Z
ROW BUFFER
CCOLOURS and SELECT
CHS
CWS
NROW
VPOL
VFLB
VERTICAL CONTROL CIRCUIT
CHS
VERD
CH
R
CRADDR
CHARACTER ROMS
HIGH RESOLUTION FONT 12 X 18
LF
MCLK
DHOR
RP
VCO
HFLB
HPOL
HORIZONTAL CONTROL and PLL
HORD
PWM_CLK
SC
CCLK
CHAR
12 BITS SHIFT REGISTERS
CWS
ESEN
SHADOW
WADDR
X32B
X54
BACKGROUND GENERATOR
W
WCOLOUR and CONTROL
OSD_EN
LUMINANCE
BLACKEDGE
CCOLOURS and SELECT
COLOUR ENCODER
VDD(A)
VSS(A)
VDD
VSS
R
G
B
FBKG
INT

IC105 MC141546P


Top View
Red OSD Input
Green OSD Input
Blue OSD Input
Video/OSD Switch
Red Video In
Vcc1
Ground
Green Video In
Vcc1
Ground
Blue Video In
VREF
Video Contrast
OSD Contrast
1
2
3
4
5
6
7
8
9
10
11
12
13
14
-A1
Contrast Attenuation
Drive Attenuation
-A2
28
27
26
25
24
23
22
21
20
19
18
17
16
15
Red Drive Adjust
Green Drive Adjust
Blue Drive Adjust
RGB Cutoff Adjust
Red Clamp Cap
Red Video Out
Vcc2
Ground
Green Video Out
Green Clamp Cap
Blue Video Out
Blue Clamp Cap
Blank Gate
Clamp Gate

IC401 LM1281

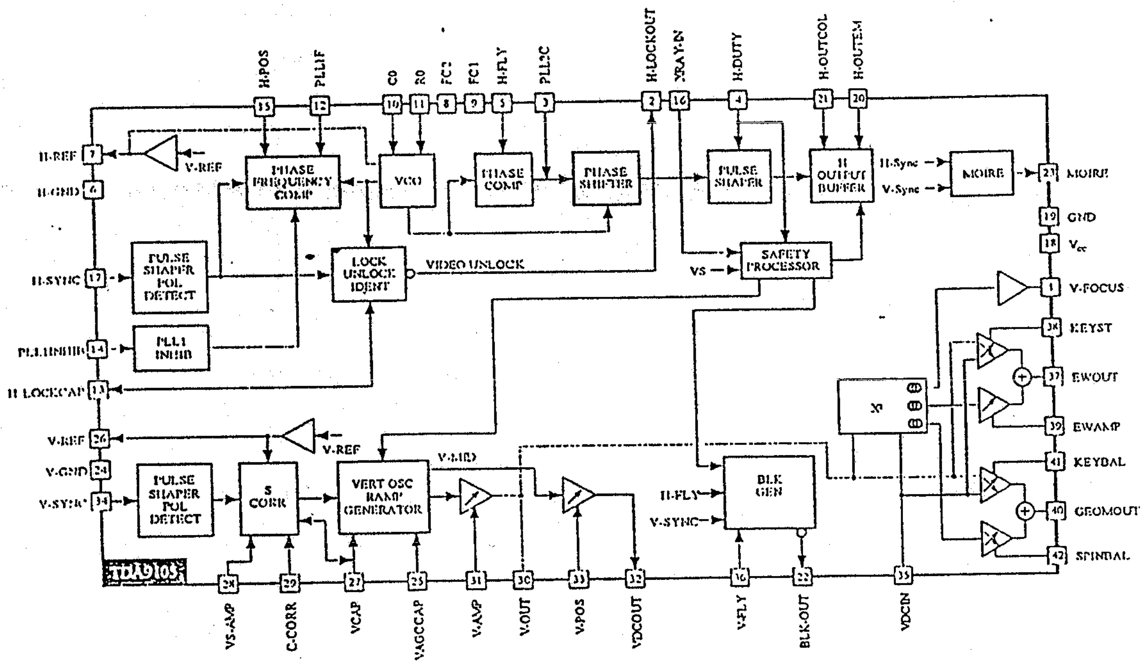

(TOP VIEW)
1A
1B
1Y
2A
2B
2Y
GND
1
2
3
4
5
6
7
14
13
12
11
10
9
8
VCC
4B
4A
4Y
3B
3A
3Y
logic symbol†
=1
1A (1)
1B (2)
2A (4)
2B (5)
3A (9)
3B (10)
4A (12)
4B (13)
(3) 1Y
(6) 2Y
(8) 3Y
(11) 4Y

FUNCTION TABLE

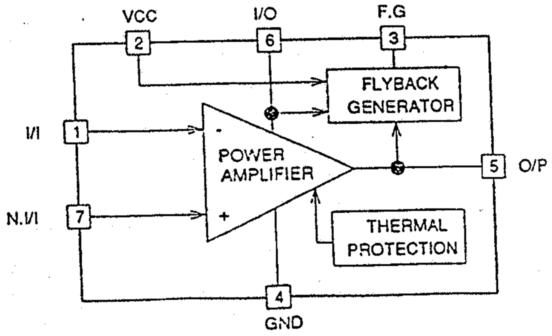
INPUTS		OUTPUT
A	B	Y
L	L	L
L	H	H
H	L	H
H	H	L

H = high level, L = low level

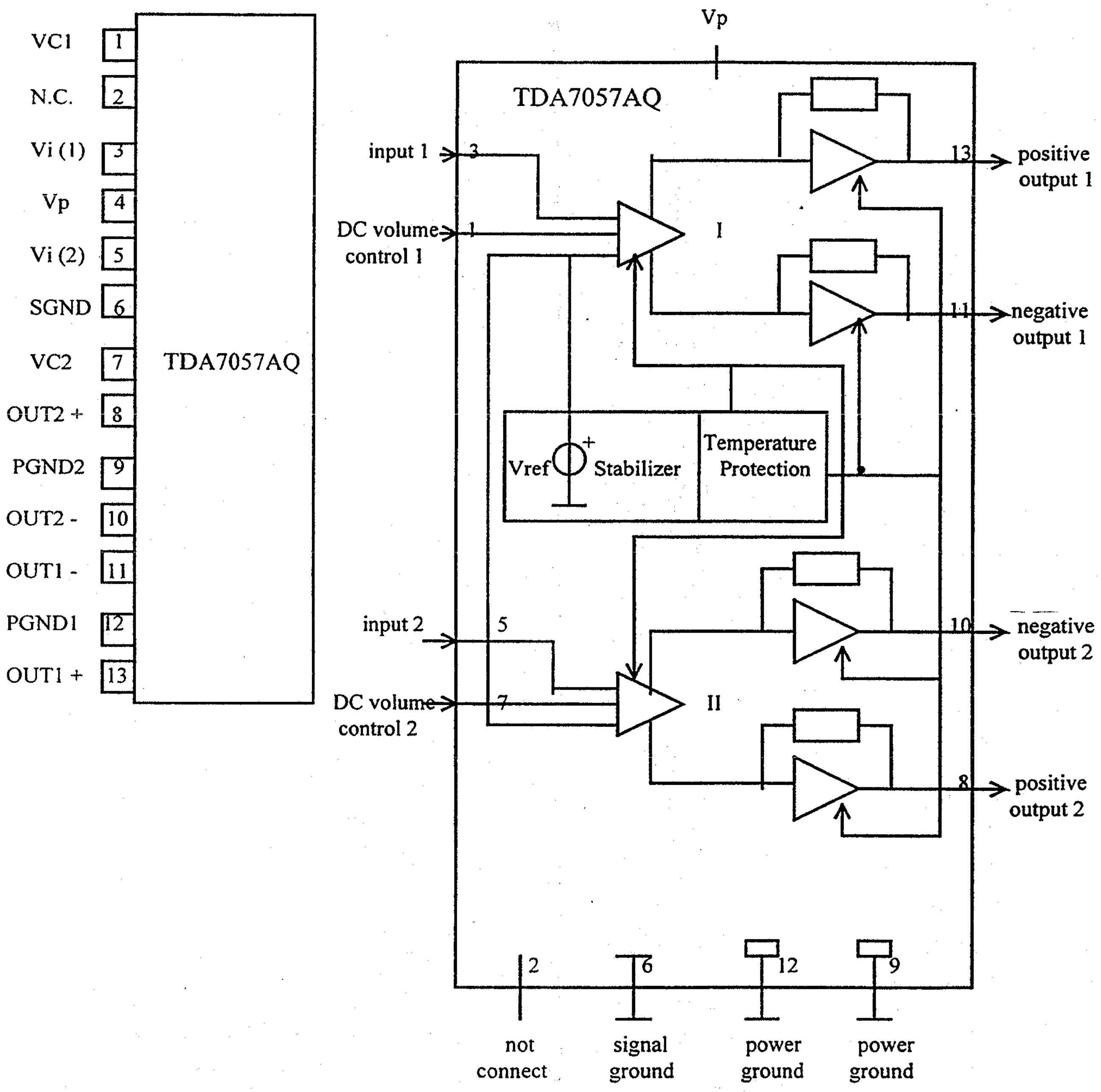
IC104 74LS86


H-POS
PLL1F
C0
R0
FC2
FC1
H-FLY
PLL2C
H-LOCKOUT
XRAY-IN
H-DUTY
H-OUTCOL
H-OUTEM
15
12
10
11
8
9
5
3
2
16
4
21
20
H-REF
7
H-GND
6
H-SYNC
17
PLL1INHIB
14
H LOCKCAP
13
V-REF
26
V-GND
24
V-SYNC
34
V-REF
PHASE FREQUENCY COMP
VCO
PHASE COMP
PHASE SHIFTER
PULSE SHAPER
H OUTPUT BUFFER
H-Sync
V-Sync
MOIRE
23
MOIRE
19
GND
18
V_{cc}
1
V-FOCUS
38
KEYST
37
EWOUT
39
EWAMP
41
KEYBAL
40
GEOMOUT
42
SPINBAL
PULSE SHAPER POL DETECT
LOCK UNLOCK IDENT
VIDEO UNLOCK
SAFETY PROCESSOR
VS
PLL1 INHIB
X^2
V-REF
PULSE SHAPER POL DETECT
S CORR
VERT OSC RAMP GENERATOR
V-MID
BLK GEN
H-FLY
V-SYNC
TDA9105
28
29
27
25
31
30
33
32
36
22
35
VS-AMP
C-CORR
VCAP
VAGCCAP
V-AMP
V-OUT
V-POS
VDCOUT
V-FLY
BLK-OUT
VDCIN

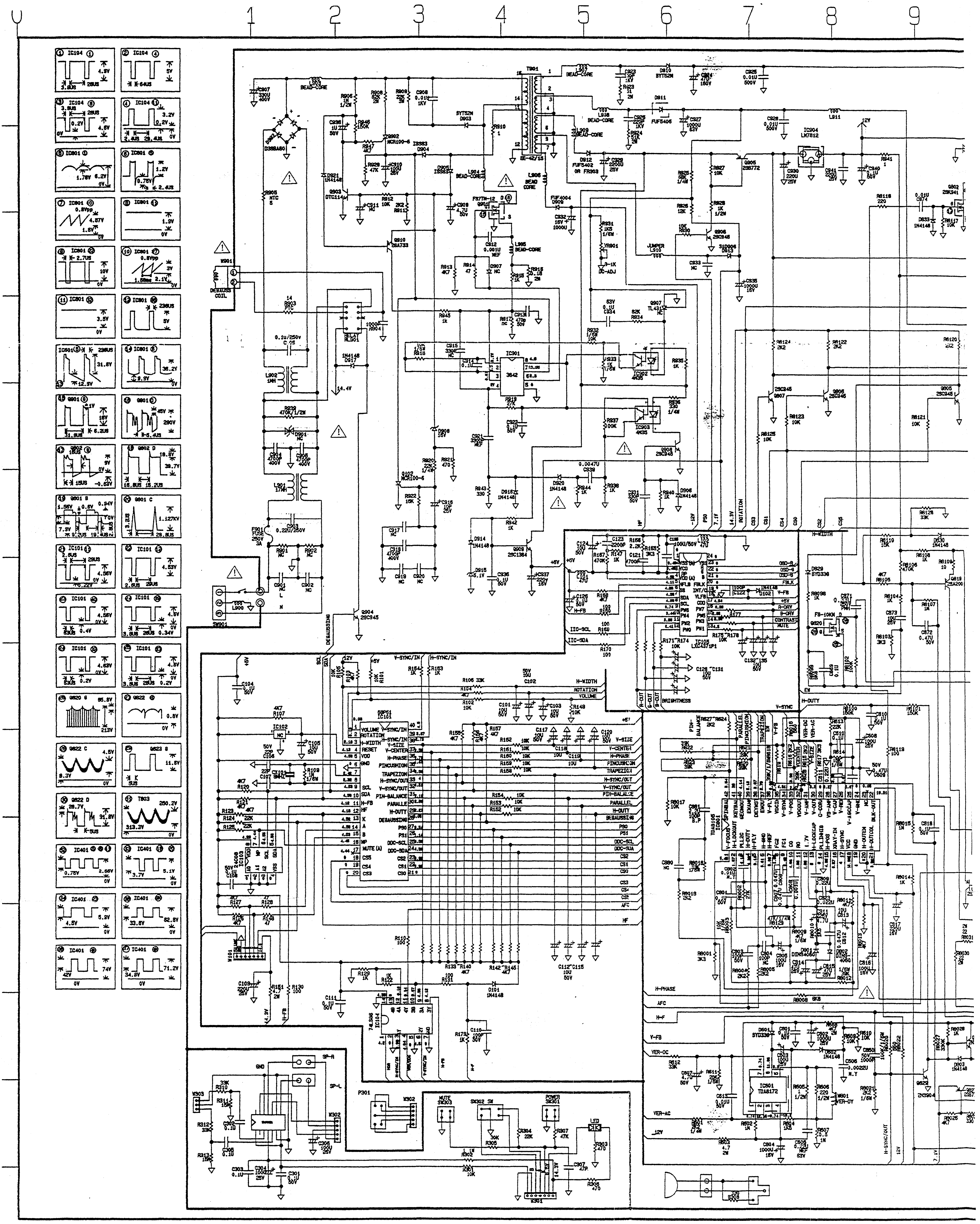
IC801 TDA9105

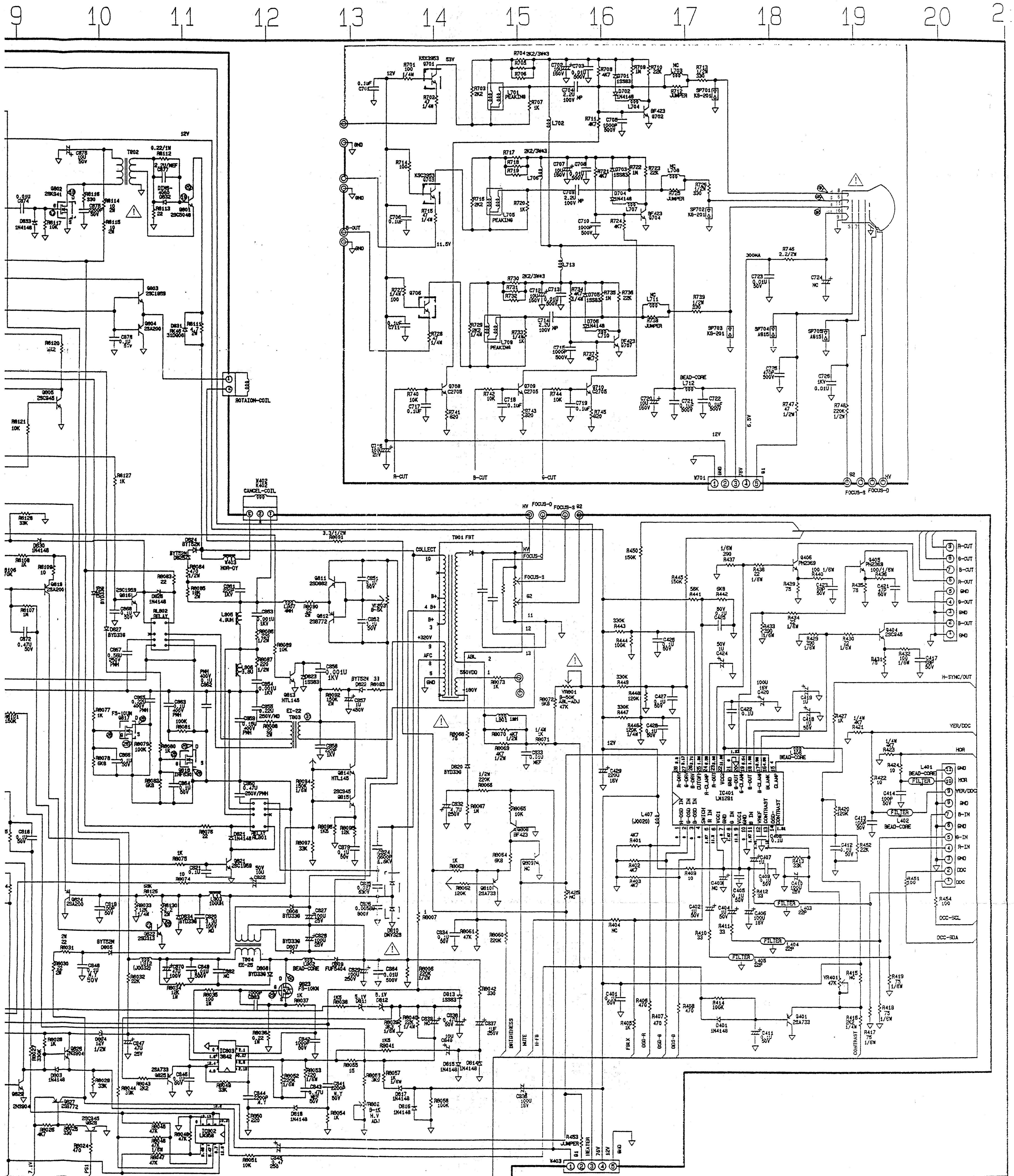

VCC
2
I/O
6
F.G
3
FLYBACK GENERATOR
I/I
1
N.I/I
7
-
+
POWER AMPLIFIER
5
O/P
THERMAL PROTECTION
4
GND

IC601 TDA8172

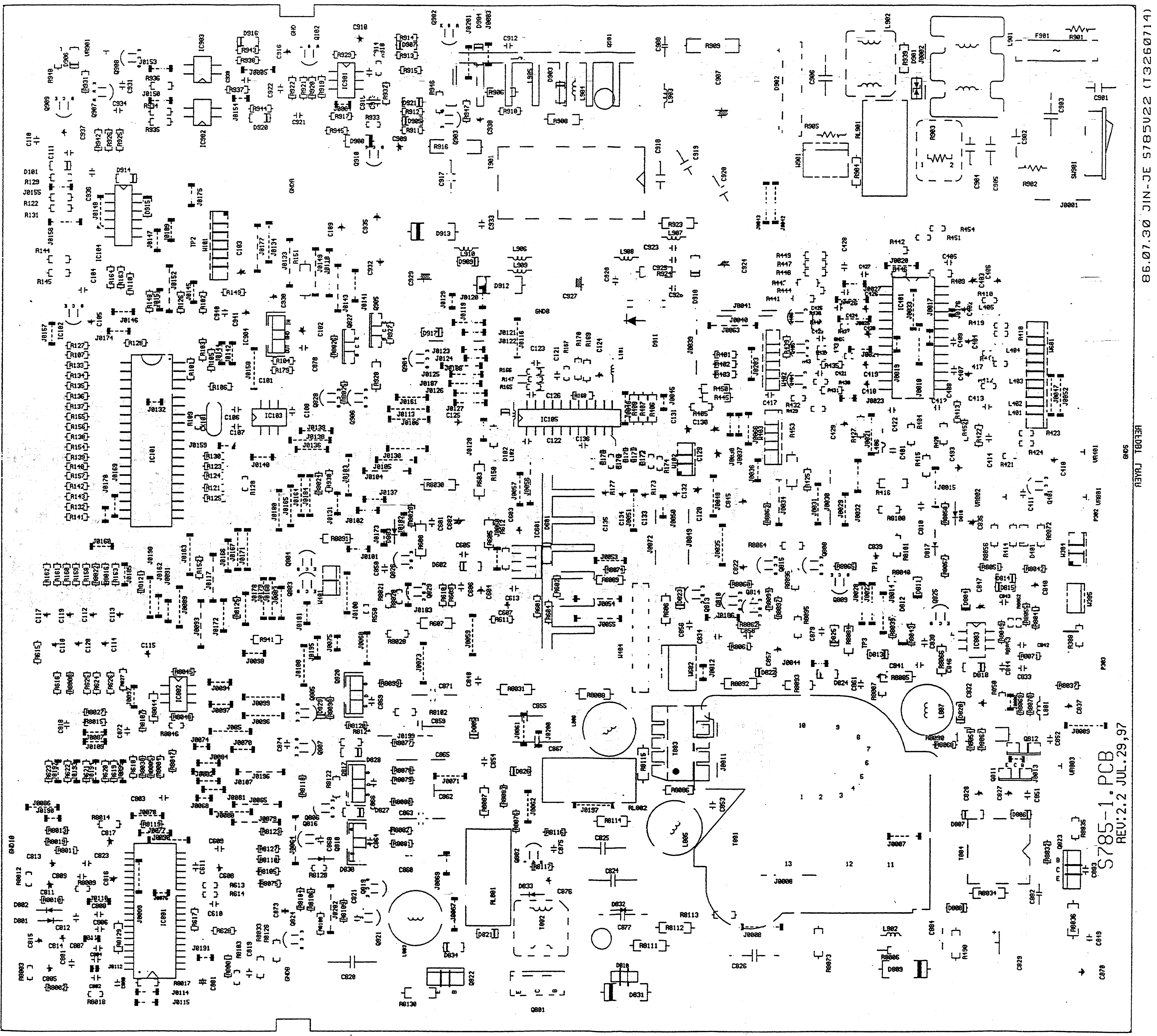

VC1
N.C.
Vi (1)
Vp
Vi (2)
SGND
VC2
OUT2 +
PGND2
OUT2 -
OUT1 -
PGND1
OUT1 +
1
2
3
4
5
6
7
8
9
10
11
12
13
TDA7057AQ
Vp
TDA7057AQ
input 1
3
DC volume control 1
1
I
13
positive output 1
11
negative output 1
Vref
+
Stabilizer
Temperature Protection
input 2
5
DC volume control 2
7
II
10
negative output 2
8
positive output 2
2
6
12
9
not connect
signal ground
power ground
power ground

IC301 TDA7057AQ


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
J
K
L
M
IC104
IC801
Q801
Q802
IC101
Q820
Q822
Q823
T803
IC401
T901
BEAD-CORE
BYT52M
EE-42/15
FUF5406
IC904
LM7812
2SB772
2SK941
1N4148
D3SBA60
NTC
DEBAUSS COIL
RELAY
FUSE
SW901
F3TH-12
2SA733
NCR100-6
TL431
IC301
3842
IC902
4N35
IC903
2SC945
2SC1384
IC105
LXC4371P1
IC101
TDA9106
IC104
74LS86
IC501
TDA8172
P301
MUTE
SW303
SW302
POWER
SW301
LED
SP-R
SP-L
H-SYNC/IN
V-SYNC/IN
H-WIDTH
ROTATION
VOLUME
V-SIZE
V-CENTER
H-PHASE
PINCUSHION
TRAPEZION
PARALLEL
H-DUTY
DEGAUSSING
DDC-SCL
DDC-SDA
BRIGHTNESS
CONTRAST
IIC-SCL
IIC-SDA
H-PHASE
AFC
H-F
V-FB
VER-DC
VER-AC


9
10
11
12
13
14
15
16
17
18
19
20
T802
Q802
2SK341
Q801
2SC5048
Q803
2SC1959
Q804
2SA206
Q805
2SC945
ROTAION-COIL
CANCEL-COIL
W402
W403
HOR-DY
RL802
RELAY
RL801
RELAY
T801 FBT
COLLECT
HV
FOCUS-O
FOCUS-S
G2
ABL
AFC
GND
B+
+320V
550VDC
-180V
T803
EI-22
T804
EE-25
IC803
3842
IC802
LM358
Q811
2SD882
Q812
2SB772
Q813
HTL145
Q814
HTL145
Q815
2SC945
Q816
2SC1959
Q817
FS-10UM
Q818
IRF630
Q821
2SC1959
Q822
2SD313
Q823
FS-10KM
Q824
2SA200
Q825
2SA733
Q826
2N3904
Q827
2SB772
Q828
2SC945
Q829
2N3904
Q808
BF423
Q810
2SA733
VR801
B-50K
ABL-ADJ
VR802
B-1K
H.V
ADJ
BEAD-CORE
BRIGHTNESS
MUTE
H-FB
Q701
KSC3953
Q702
BF423
Q703
KSC3953
Q704
BF423
Q706
Q707
BF423
Q708
C2705
Q709
C2705
Q710
C2705
L701
PEAKING
L705
PEAKING
L709
PEAKING
L712
BEAD-CORE
SP701
KS-201
SP702
KS-201
SP703
KS-201
SP704
AS15
SP705
AS15
R-CUT
B-CUT
G-CUT
W701
12V
76V
6.5V
53V
11.5V
300MA
FOCUS-S
FOCUS-D
IC401
LM1291
Q401
2SA733
Q404
2SC945
Q405
PN2369
Q406
PN2369
VR401
47K
L401
BEAD-CORE
L402
BEAD-CORE
FILTER
R-CUT
G-CUT
B-CUT
R-OUT
GND
G-OUT
B-OUT
H-SYNC/OUT
VER/DDC
HOR
VER/DDC
B-IN
G-IN
R-IN
DDC
DDC-SCL
DDC-SDA
CONTRAST
FBLK
OSD-R
OSD-G
OSD-B
R453
JUMPER
HEATER
G1
W403
PS1
7.1V

MODEL	7G1r/7G1rA/7V1r/7V1rA/7V1r*/7V1rA*		DESIGN	DRAWING
DATE	9/8.97	PREPARE		F.Y.ZOU
REVISION	A	CHECKED		
		APPOVED		


S785-1.PCB
REV:2.2 JUL.29,97
IC101
IC103
IC105
IC301
IC302
IC303
IC401
IC801
IC802
IC803
RL801
RL802
RL901
T801
T802
T803
T804
T901
F901
SW901
GND
GND8
GND9
GND10
TP1
TP2
TP3

86.07.30 JIN-JE 5785V22 (T3260714)